=> d ibib abs ind l8 1-1

L8 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:355892 HCAPLUS
DOCUMENT NUMBER: 138:334072
TITLE: Encoding characteristics of a biological sample
INVENTOR(S): **Aronow, David Benjamin**
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 25 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003088363	A1	20030508	US 2001-53082	20011102
WO 2003040315	A2	20030515	WO 2002-US34724	20021029

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-53082 A 20011102

AB In general, in one aspect, the disclosure describes a method of encoding a characteristic of a sample. The method includes identifying a collection of more than one **codes** of a standard coding scheme where different **codes** correspond to different standard coding scheme concepts. The method forms a pre-coordinated **code** not found in the standard coding scheme from a concatenation of the **codes.** The method also stores the pre-coordinated **code** along with other pre-coordinated **codes.**

IC ICM G06F019-00
ICS G01N033-48; G01N033-50; G06G007-48; G06G007-58
NCL 702019000; 700001000; 703011000
CC 9-16 (Biochemical Methods)
Section cross-reference(s): 1, 14
ST encoding biol sample
IT Nomenclature, general
(Systemized; encoding characteristics of a biol. sample)
IT Information systems
(**code**; encoding characteristics of a biol. sample)
IT Animal tissue
Biological materials
Computer application
Computer program
Diagnosis
Dictionaries
Human
Interface
Medicine
(encoding characteristics of a biol. sample)
IT Information systems

(network; encoding characteristics of a biol. sample)
IT Information systems
(storage; encoding characteristics of a biol. sample)
IT Drugs
(veterinary; encoding characteristics of a biol. sample)

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=> d que stat l15
L1        34698 SEA FILE=HCAPLUS ABB=ON  ?BIOL?(W)(?SAMPLE? OR ?MATERIAL? OR
                ?SPECIMEN?)
L2         1118 SEA FILE=HCAPLUS ABB=ON  L1 AND (?CODE? OR ?CODING? OR
                ?LEXIC?)
L8          278 SEA FILE=HCAPLUS ABB=ON  L1 AND ?INDEX?
L9         1391 SEA FILE=HCAPLUS ABB=ON  L2 OR L8
L10          59 SEA FILE=HCAPLUS ABB=ON  L9 AND (?COORD? OR ?CONCAT? OR
                ?STOR?)
L12          44 SEA FILE=HCAPLUS ABB=ON  L10 AND (PRD<20011102 OR PD<20011102)
L13          17 SEA FILE=HCAPLUS ABB=ON  L12 AND (?VETERIN? OR ?ANIMAL?)
L15          44 SEA FILE=HCAPLUS ABB=ON  L12 OR L13

=> d ibib abs l15 1-44

L15  ANSWER 1 OF 44  HCAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         2003:8099  HCAPLUS
DOCUMENT NUMBER:          138:34127
TITLE:                    Use of structured non-coding sequences in
                          nucleic acids to store information for
                          labeling of biological materials
INVENTOR(S):              Matthews, Derek
PATENT ASSIGNEE(S):       National Institute of Agricultural Botany, UK
SOURCE:                   Brit. UK Pat. Appl., 47 pp.
                          CODEN: BAXXDU
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.          DATE
     ---------------      ----   --------    --------------------     --------
     GB 2376686            A1    20021224    GB 2002-3140             20020211 <--
     GB 2376686            B2    20050323
PRIORITY APPLN. INFO.:                       GB 2001-3364         A   20010210 <--
AB   A method of coding information in nucleic acids for use in the
     labeling of a biol. material is described.  The label
     is a DNA sequence that is flanked by primer sequences and has a leader
     sequence 5' to the informational region.  The informational region is
     flanked by a common start and stop signal and is separated into a number of
     domains by an invariant spacer sequence.  Each domain contains a specific
     datum that is represented by the nucleic acid sequence and a defined
     coding scheme.  Preferred coding schemes include Huffman
     coding and the data may be protected against errors by use of
     parity checks.  The scheme can be used to convert the information into
     restriction sites that allow the use of restriction mapping to identify
     the sequence.
REFERENCE COUNT:          4      THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
                                 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15  ANSWER 2 OF 44  HCAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         2002:906569  HCAPLUS
DOCUMENT NUMBER:          138:3277
TITLE:                    PCR primer and kit for Foot and mouth disease virus
                          infection diagnosis
INVENTOR(S):              Callahan, Johnny Dale; Nelson, William Max; Mangold,
                          Beverly L.
PATENT ASSIGNEE(S):       Tetracore, Inc., USA
SOURCE:                   PCT Int. Appl., 43 pp.
```

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002095074	A1	20021128	WO 2002-US15826	20020520 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003149259	A1	20030807	US 2002-147920	20020520 <--
PRIORITY APPLN. INFO.:			US 2001-291636P P	20010518 <--

AB The invention relates to diagnostic methods, probes, detection systems and kits for the identification of foot and mouth disease virus (FMDV) infection in a **biol. sample** obtained from a farm **animal.** It was discovered that a highly conserved region of sequence existed with the 3D **coding** region **encoding** viral polymerase (or replicase) of the FMDV genome. This region was found to be strikingly similar, and often identical or with only one or two nucleotide substitution, between the various serotypes of FMDV. Primers targeted to 3'-terminal third of 3D gene are provided which are shown to detect FMDV, including various isolates or strains of serotypes Asia 1, A, C, O, Sat 1, Sat 2, and Sat 3 isolated from infected **animals** or infected cell culture. The method can distinguish a FMDV-infected patient from a patient infected with one or more of the viruses selected from the group consisting of swine vesicular disease virus, vesicular stomatitis virus, and vesicular exanthema of swine virus. Thus, by performing PCR anal. with probes comprising sequences form this region or ELISA with antibodies directed to polypeptide products expressed from this region, a plurality of serotypes of FMDV could be detected from a single test. Further, by including dried PCR reagents plus trehelose, kits could be **stored** at room temps. for long periods of time without any significant loss in sensitivity or specificity. Thus, FMDV assays could be performed on site, within the field and quickly so that a diagnosis of FMDV infection can be made within hours.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 3 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:866740 HCAPLUS
DOCUMENT NUMBER: 137:368547
TITLE: Methods for diagnosis of hepatitis B virus and HBcAg vaccines
INVENTOR(S): Letourneur, Odile; Watelet, Benedicte
PATENT ASSIGNEE(S): Bio Merieux, Fr.
SOURCE: Eur. Pat. Appl., 27 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1256804	A1	20021113	EP 2001-420103	20010509 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.: EP 2001-420103 20010509 <--

AB The invention concerns an expression cassette which is functional in a cell derived from a yeast selected from the group consisting of strain Pichia and Schizosaccharomyces, allowing the expression of HBc DNA or fragments thereof **encoding** HBcAg or fragments thereof, placed under the control of the elements necessary for its expression; a process for the detection of anti-HBc antibodies or HBcAg protein in a **biol. sample.** Enzyme immunoassays were used to detect anti-HBc antibodies or HBcAg. Antibodies used in the detection of HBcAg were produced by immunization of **animals** with HBcAg. Vaccines for the prevention or treatment of hepatitis B virus comprise HBcAg produced in the yeast cells.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 4 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:696557 HCAPLUS

DOCUMENT NUMBER: 137:237692

TITLE: Glycosylation-resistant cyanovirin analogs and genes **encoding** them and their manufacture for use as antiviral agents

INVENTOR(S): Boyd, Michael R.

PATENT ASSIGNEE(S): Department of Health and Human Services, USA

SOURCE: U.S. Pat. Appl. Publ., 42 pp., Cont.-in-part of U. S. Ser. No. 416,434.
CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002127675	A1	20020912	US 2001-815079	20010322 <--
US 6780847	B2	20040824		
US 5843882	A	19981201	US 1995-429965	19950427 <--
US 5821081	A	19981013	US 1996-638610	19960426 <--
US 6015876	A	20000118	US 1997-969378	19971113 <--
US 6428790	B1	20020806	US 1999-416434	19991012 <--
US 6420336	B1	20020716	US 1999-417797	19991027 <--
US 2002151476	A1	20021017	US 1999-427873	19991027 <--
US 6743577	B2	20040601		
US 2003103997	A1	20030605	US 2001-814884	20010322 <--
US 6586392	B2	20030701		
CA 2441287	AA	20021003	CA 2002-2441287	20020322 <--
WO 2002077189	A2	20021003	WO 2002-US9277	20020322 <--
WO 2002077189	A3	20040701		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1456382	A2	20040915	EP 2002-723611	20020322 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004535784	T2	20041202	JP 2002-576632	20020322 <--
US 2004220107	A1	20041104	US 2004-857158	20040528 <--
PRIORITY APPLN. INFO.:			US 1995-429965	A2 19950427 <--
			US 1995-429965	A3 19950427 <--
			US 1996-638610	A3 19960426 <--
			US 1997-969378	A2 19971113 <--
			US 1999-267447	B2 19990312 <--
			US 1999-416434	A2 19991012 <--
			US 1997-969689	A2 19971113 <--
			US 1998-137134	A3 19980819 <--
			US 2001-815079	A 20010322 <--
			WO 2002-US9277	W 20020322

AB Amino acid-substituted analogs of cyanovirins that are resistant to glycosylation and that retain their antiviral activity are described for treatment of viral infection. Further provided is a method of inhibiting prophylactically or therapeutically a viral infection, specifically an influenza viral infection, of a host. Cloning and expression of a synthetic gene for the protein is demonstrated. The protein binds gp120env of HIV-1 and so may be used to capture the virus or as an antiviral agent against it. It is also capable of inhibiting a broad range of influenza A and influenza B virus in **animal** cell culture with IC50's of 0.0037-0.15 mg protein/mL. Expression of the gene for a cyanovirin labeled with a FLAG peptide in **animal** cells indicated that the protein is glycosidated in **animal** cells.

REFERENCE COUNT: 176 THERE ARE 176 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 5 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:634050 HCAPLUS
DOCUMENT NUMBER: 138:214798
TITLE: Interactions between medicines and assays in internal medicine laboratory services
AUTHOR(S): Terleira Fernandez, A.; Vargas Castrillon, E.; Puerro Vicente, M.; De Miguel Gallo, V.; Gil Lopez-Oliva, A.
CORPORATE SOURCE: Hospital Clinico San Carlos, Servicio de Farmacologia Clinica, Madrid, Spain
SOURCE: Atencion Farmaceutica (**2001**), 3(5), 328-329, 331-334, 336
CODEN: AFARFP; ISSN: 1139-7357
PUBLISHER: Rasgo Editorial
DOCUMENT TYPE: Journal
LANGUAGE: Spanish

AB The interferences of drug medication with laboratory assays in terms of biol. increased/decreased values (drug influence in the body on the measured analyte), anal. increased/decreased values (drug impact on the reaction mechanism used in assay), false pos. and false neg. results, and interaction of pathol. and drug induced changes (excessive values increase if changes are in the same direction or spurious normalization if opposite). The study used data from .apprx.404 elderly patients with average of 57.4 assays and 11.6 drugs used per patient during the hospital stay (average 16.9 days). Information on the general patient data, drugs used, and

laboratory assay data were **stored** in 3 sep. databases. Using a computer program, 19,741 possible interactions between drugs and laboratory assays were identified, with 12.7% anal. increases, 11.1% anal. decreases, 72.3% biol. increases, and 30.1% biol. decreases. The average number of possible interactions per patient was 48.8 (median 31), with the biol. increase being the most frequent case (35.5/patient, median 23). In 63.3% there was no actual interaction found, in 25% there were augmented values of laboratory assays, and in 11.4% there were decreased values. The prescriptions could potentially cause interactions with 41.9% drugs used; 34.4% of the abnormal results and 26.6% of those considered normal could be affected by interactions. Thus, the interactions between drugs and laboratory assays occur with a high frequency and could be potentially responsible for erroneous data interpretation.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 6 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:354033 HCAPLUS
DOCUMENT NUMBER: 136:337383
TITLE: Diagnostic assay system
INVENTOR(S): Ray, Robert A.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 15 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2002055176	A1	20020509	US 2001-929751		20010814 <--
PRIORITY APPLN. INFO.:			US 2000-246775P	P	20001108 <--

AB Disclosed is a method for performing an anal. assay by providing a kit for collecting and **storing** a test sample, the kit including a sample collection device, a sample **storage** device, and a printed material having indicated thereon an electronic address for accessing the result of the assay; using the kit to collect a specimen from a test subject at a first location such as the subject's home or a health care provider's office; transporting the collected specimen to an off-site laboratory; analyzing the specimen at the off-site laboratory; and reporting the result of the anal. over a computer communications network such as the Internet.

L15 ANSWER 7 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:315403 HCAPLUS
DOCUMENT NUMBER: 136:320323
TITLE: Multidimensional morphological reconstruction of gene expression
INVENTOR(S): Doyle, Michael D.; Pescitelli, Maurice J.; Williams, Betsey S.; Michaels, George S.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 8 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002048766	A1	20020425	US 2001-916709	20010727 <--
PRIORITY APPLN. INFO.:			US 2000-221611P P	20000728 <--

AB A method of morphol. reconstruction of biol. activity in a tissue sample maps biol. data resulting from anal. of tissue samples onto a 3-D morphol. rendering of the **biol. sample.** Each slice in a set of histol. slices, **indexed** by a first **index**, is micro dissected into micro samples **indexed** by a pair of first and second **indexes.** The **indexes** are utilized to spatially map biol. data to the 3-D rendering. According to one aspect of the present invention, a method and system for the multidimensional morphol. reconstruction of tissue biol. activity makes it possible for a biol. tissue specimen to be imaged in multiple dimensions to allow morphol. reconstruction. The same tissue specimen is phys. sampled in a regular raster array, so that tissue samples are taken in a regular multidimensional matrix pattern across each of the dimensions of the tissue specimen. Each sample is isolated and **coded** so that it can be later correlated to the specific multidimensional raster array **coordinates**, thereby providing a correlation with the sample's original pre-sampling morphol. location in the tissue specimen. Each tissue sample isolate is then analyzed with broad-spectrum biol. activity methods, providing information on a multitude of biol. functional characteristics for that sample. The resultant raster-based biol. characteristic data may then be spatially mapped onto the original multidimensional morphol. matrix of image data.

L15 ANSWER 8 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:66012 HCAPLUS
DOCUMENT NUMBER: 136:115131
TITLE: Matrices with memories
INVENTOR(S): Nova, Michael P.; Potash, Hanan
PATENT ASSIGNEE(S): Discovery Partners International, Inc., USA
SOURCE: U.S., 117 pp., Cont.-in-part of U.S. 5,961,923.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 20
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6340588	B1	20020122	US 1998-51022	19980922 <--
US 5741462	A	19980421	US 1995-428662	19950425 <--
US 5925562	A	19990720	US 1995-480196	19950607 <--
US 6331273	B1	20011218	US 1995-473660	19950607 <--
US 6352854	B1	20020305	US 1995-480147	19950607 <--
US 6416714	B1	20020709	US 1995-484486	19950607 <--
US 5874214	A	19990223	US 1995-538387	19951003 <--
US 6025129	A	20000215	US 1995-567746	19951205 <--
WO 9636436	A1	19961121	WO 1996-US6145	19960425 <--

W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN

US 6100026	A	20000808	US 1996-633410	19960610 <--
US 6319668	B1	20011120	US 1996-669252	19960624 <--
US 6284459	B1	20010904	US 1996-711426	19960905 <--
US 6017496	A	20000125	US 1996-709435	19960906 <--
US 5961923	A	19991005	US 1996-723423	19960930 <--
PRIORITY APPLN. INFO.:			US 1995-428662	A2 19950425 <--
			US 1995-473660	A2 19950607 <--
			US 1995-480147	A2 19950607 <--
			US 1995-480196	A2 19950607 <--
			US 1995-484486	A2 19950607 <--
			US 1995-484504	A2 19950607 <--
			US 1995-538387	A2 19951003 <--
			US 1995-567746	A2 19951205 <--
			US 1996-639813	B2 19960402 <--
			WO 1996-US6145	A2 19960425 <--
			US 1996-633410	A2 19960610 <--
			US 1996-669252	A2 19960624 <--
			US 1996-711426	A2 19960905 <--
			US 1996-709435	A2 19960906 <--
			US 1996-723423	A2 19960930 <--
			US 1995-184504	A2 19950607 <--
			US 1997-945053	B2 19971021 <--

AB Combinations, called matrixes with memories, of matrix materials that are **encoded** with an optically readable **code** are provided. The matrix materials are those that are used in as supports in solid phase chemical and biochem. syntheses, immunoassays and hybridization reactions. The matrix materials may addnl. include fluorophores or other luminescent moieties to produce luminescing matrixes with memories. The memories include electronic and optical **storage** media and also include optical memories, such as bar **codes** and other machine-readable **codes.** By virtue of this combination, mols. and biol. particles, such as phage and viral particles and cells, that are in proximity or in phys. contact with the matrix combination can be labeled by programming the memory with identifying information and can be identified by retrieving the **stored** information. Combinations of matrix materials, memories, and linked mols. and **biol. materials** are also provided. The combinations have a multiplicity of applications, including combinatorial chemical, isolation and purification of target macromols., capture and detection of macromols. for anal. purposes, selective removal of contaminants, enzymic catalysis, cell sorting, sensors and drug delivery, chemical modification and other uses. Methods for tagging mols., biol. particles and matrix support materials, immunoassays, receptor binding assays, scintillation proximity assays, non-radioactive proximity assays, and other methods are also provided. Sensors containing a memory in combination with a matrix are also provided.

REFERENCE COUNT: 70 THERE ARE 70 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 9 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:851198 HCAPLUS

DOCUMENT NUMBER: 136:1109

TITLE: Human galanin receptor-like G protein coupled receptor polynucleotides and peptides, and reagents regulating galanin receptor-like GPCR function for use in treating pathophysiological disorders

INVENTOR(S): Ramakrishnan, Shyam

PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Germany

SOURCE: PCT Int. Appl., 109 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001087930	A2	20011122	WO 2001-EP5569	20010516 <--
WO 2001087930	A3	20020829		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1287021	A2	20030305	EP 2001-947284	20010516 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2004053244	A1	20040318	US 2002-276548	20021118 <--
PRIORITY APPLN. INFO.:			US 2000-205071P P	20000518 <--
			WO 2001-EP5569 W	20010516 <--

AB Reagents which regulate human galanin receptor-like GPCR and reagents which bind to human galanin receptor-like gene products can be used to regulate the effect of galanin for therapeutic purposes. Treatment of pathophysiol. disorders such as eating disorders, cancer, diabetes, osteoporosis, obesity, pain, depression, ischemia, Alzheimer's disease, sleep disorders, migraine, anxiety, and reproductive disorders can be treated. Processes such as cognition, analgesia, sensory processing (olfactory, visual), processing or visceral information, motor **coordination**, modulation of dopaminergic activity, and neuroendocrine function can be modulated. Pharmaceutical compns. and methods for screening drugs which regulate galanin receptor-like GPCR activity are also claimed.

L15 ANSWER 10 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:844893 HCAPLUS
DOCUMENT NUMBER: 136:2446
TITLE: Methods for screening molecules using solid phase synthesis with labels
INVENTOR(S): Nova, Michael P.; Potash, Hanan; Xiao, Xiao-yi; Parandoosh, Zahra; David, Gary S.
PATENT ASSIGNEE(S): Discovery Partners International, USA
SOURCE: U.S., 91 pp., Cont.-in-part of U.S. 6,100,026.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 20
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6319668	B1	20011120	US 1996-669252	19960624 <--
US 5741462	A	19980421	US 1995-428662	19950425 <--
US 5925562	A	19990720	US 1995-480196	19950607 <--
US 6331273	B1	20011218	US 1995-473660	19950607 <--

US 6352854	B1	20020305	US 1995-480147	19950607	<--
US 6416714	B1	20020709	US 1995-484486	19950607	<--
US 5874214	A	19990223	US 1995-538387	19951003	<--
US 6025129	A	20000215	US 1995-567746	19951205	<--
WO 9636436	A1	19961121	WO 1996-US6145	19960425	<--

W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI

RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN

US 6100026	A	20000808	US 1996-633410	19960610	<--
US 6284459	B1	20010904	US 1996-711426	19960905	<--
US 6017496	A	20000125	US 1996-709435	19960906	<--
US 5961923	A	19991005	US 1996-723423	19960930	<--
WO 9712680	A2	19970410	WO 1996-US15999	19961003	<--
WO 9712680	A3	19970821			

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG

AU 9672573	A1	19970428	AU 1996-72573	19961003	<--
EP 853497	A2	19980722	EP 1996-934064	19961003	<--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

US 6329139	B1	20011211	US 1997-912998	19970811	<--
US 6340588	B1	20020122	US 1998-51022	19980922	<--

PRIORITY APPLN. INFO.:

US 1995-428662	A2	19950425	<--
US 1995-473660	A2	19950607	<--
US 1995-480147	A2	19950607	<--
US 1995-480196	A2	19950607	<--
US 1995-484486	A2	19950607	<--
US 1995-484504	A2	19950607	<--
US 1995-538387	A2	19951003	<--
US 1995-567746	A2	19951205	<--
US 1996-639813	B2	19960402	<--
WO 1996-US6145	A2	19960425	<--
US 1996-633410	A2	19960610	<--
US 1997-945053	B2	19971021	<--
US 1995-184504	A2	19950607	<--
US 1996-669252	A2	19960624	<--
US 1996-711426	A2	19960905	<--
US 1996-709435	A2	19960906	<--
US 1996-723423	A	19960930	<--
WO 1996-US15999	W	19961003	<--
US 1996-726703	B2	19961007	<--
US 1996-743984	A2	19961028	<--
US 1996-741685	B2	19961031	<--
US 1997-857800	B2	19970122	<--
US 1997-826253	B2	19970327	<--

AB Combinations, called matrixes with memories, of matrix materials that are **encoded** with an optically readable **code** are provided. The matrix materials are those that are used in as supports in solid phase chemical and biochem. syntheses, immunoassays and hybridization reactions. The matrix materials may addnl. include fluorophores or other luminescent moieties to produce luminescing matrixes with memories. The memories

include electronic and optical **storage** media and also include optical memories, such as bar **codes** and other machine-readable **codes.** By virtue of this combination, mols. and biol. particles, such as phage and viral particles and cells, that are in proximity or in phys. contact with the matrix combination can be labeled by programming the memory with identifying information and can be identified by retrieving the **stored** information. Combinations of matrix materials, memories, and linked mols. and **biol. materials** are also provided. The combinations have a multiplicity of applications, including combinatorial chemical, isolation and purification of target macromols., capture and detection of macromols. for anal. purposes, selective removal of contaminants, enzymic catalysis, cell sorting, drug delivery, chemical modification and other uses. Methods for tagging mols., biol. particles and matrix support materials, immunoassays, receptor binding assays, scintillation proximity assays, non-radioactive proximity assays, and other methods are also provided. Diagrams describing the apparatus are given.

REFERENCE COUNT: 73 THERE ARE 73 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 11 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:817059 HCAPLUS
DOCUMENT NUMBER: 135:341148
TITLE: Biochips for the automated processing and **storage** of clinical samples
INVENTOR(S): Staab, Hans-juergen
PATENT ASSIGNEE(S): Bioref Gmbh, Germany
SOURCE: PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2001084150	A1	20011108	WO 2001-EP2851		20010314 <--
W: AU, BR, CA, CN, CZ, EE, HU, IL, IN, JP, KR, LT, LV, MX, NO, NZ, PL, RU, SG, SI, SK, TR, US, ZA					
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR					
DE 10020704	A1	20011108	DE 2000-10020704		20000427
EP 1277055	A1	20030122	EP 2001-913879		20010314 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, LT, LV, FI, CY, TR					
JP 2004517297	T2	20040610	JP 2001-581123		20010314 <--
US 2003124583	A1	20030703	US 2002-257661		20021224 <--
PRIORITY APPLN. INFO.:			DE 2000-10020704	A	20000427 <--
			WO 2001-EP2851	W	20010314 <--

AB The invention concerns biochips for process automated binding, anal. and **storage** of **biol. samples**, especially clin. samples; biochips contain arrays of sample holding areas that can be wells or flat spots divided by hydrophobic borders; also bar-**codes** for sample identification are formed on the biochips. Sample areas are produced by phys., chemical treatments, printing or binding of linkers. Samples, reagents, washing solns. are applied onto the biochips with pipetting robots. Multiple anal. can be performed on the same biochips using different sample spots; samples of non-processed spots are **stored**

between the detns. on the biochip. Body fluids are analyzed in automated processes using the biochips with **codes** pertinent to the patients. Determined values are **stored** in electronically.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 12 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:730817 HCAPLUS
DOCUMENT NUMBER: 135:268198
TITLE: Sequences of human oncogenic osteomalacia-related protein 1 (OOM-1) and therapeutic uses thereof
INVENTOR(S): Schiavi, Susan; Madden, Stephen; Manavalan, Parthasarathy; Levine, M. D. Michael; Jan De Beur, Suzanne
PATENT ASSIGNEE(S): Genzyme Corporation, USA; Johns Hopkins University
SOURCE: PCT Int. Appl., 65 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001072826	A2	20011004	WO 2001-US9289	20010322 <--
WO 2001072826	A3	20020523		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2002102641	A1	20020801	US 2001-814550	20010322 <--
PRIORITY APPLN. INFO.:			US 2000-191786P P	20000324 <--
			US 2000-241598P P	20001019 <--

AB The invention provides sequences of protein and cDNA of human oncogenic osteomalacia-related protein (OOM-1). The invention also provides expression systems, including gene delivery vehicles such as liposomes and vectors, and host cells containing the polynucleotides. The present invention further provides proteins **encoded** by the polynucleotides, antisense oligonucleotides, antibodies that specifically recognize and bind to these proteins, as well as hybridoma cell lines. In particular, the invention discloses that the proteins are involved in modulating bone mineralization and phosphate metabolism The invention also provides methods of monitoring expression of the gene and detecting neoplastic cells associated with oncogenic osteomalacia. The invention discloses methods for modulating bone mineralization activity and phosphate metabolism as well as methods for treating diseases related to abnormal bone mineralization and abnormal phosphate metabolism

L15 ANSWER 13 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:693501 HCAPLUS
DOCUMENT NUMBER: 135:268237
TITLE: Cloning, sequencing and regulation of human galanin receptor-like G protein-coupled receptor
INVENTOR(S): Ramakrishnan, Shyam

PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Germany
SOURCE: PCT Int. Appl., 123 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE	
WO 2001068843	A1	20010920	WO 2001-EP2925		20010315	<--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM						
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG						
EP 1268779	A1	20030102	EP 2001-917091		20010315	<--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR						
US 2003073115	A1	20030417	US 2002-221737		20020916	<--
PRIORITY APPLN. INFO.:			US 2000-189898P	P	20000316	<--
			US 2000-210983P	P	20000612	<--
			US 2000-251515P	P	20001207	<--
			WO 2001-EP2925	W	20010315	<--

AB The invention provides protein and cDNA sequences of human galanin receptor-like G protein-coupled receptor. Reagents which regulate human galanin receptor-like GPCR and reagents which bind to human galanin receptor-like gene products can be used to regulate the effect of galanin for therapeutic purposes. Treatment of pathophysiol. disorders such as eating disorders, including obesity, diabetes, cardiovascular disease, asthma, pain, depression, ischemia, Alzheimer's disease, sleep disorders, migraine, anxiety, and reproductive disorders can be treated. Processes such as cognition, analgesia, sensory processing (olfactory, visual), processing or visceral information, motor **coordination**, modulation of dopaminergic activity, and neuroendocrine function can be modulated.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 14 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:651563 HCAPLUS
DOCUMENT NUMBER: 135:223736
TITLE: Solid support matrices with memories and combinatorial libraries therefrom
INVENTOR(S): Nova, Michael P.; Senyei, Andrew E.; Xiao, Xiao-Yi; Zhao, Chanfeng; Potash, Hanan
PATENT ASSIGNEE(S): Discovery Partners International, USA
SOURCE: U.S., 96 pp., Cont.-in-part of U.S. Ser. No. 669,252.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 20
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

US 6284459	B1	20010904	US 1996-711426	19960905	<--
US 5741462	A	19980421	US 1995-428662	19950425	<--
US 5925562	A	19990720	US 1995-480196	19950607	<--
US 6331273	B1	20011218	US 1995-473660	19950607	<--
US 6352854	B1	20020305	US 1995-480147	19950607	<--
US 6416714	B1	20020709	US 1995-484486	19950607	<--
US 5874214	A	19990223	US 1995-538387	19951003	<--
US 6025129	A	20000215	US 1995-567746	19951205	<--
WO 9636436	A1	19961121	WO 1996-US6145	19960425	<--
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RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN					
US 6100026	A	20000808	US 1996-633410	19960610	<--
US 6319668	B1	20011120	US 1996-669252	19960624	<--
US 6017496	A	20000125	US 1996-709435	19960906	<--
US 5961923	A	19991005	US 1996-723423	19960930	<--
WO 9712680	A2	19970410	WO 1996-US15999	19961003	<--
WO 9712680	A3	19970821			
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG					
AU 9672573	A1	19970428	AU 1996-72573	19961003	<--
EP 853497	A2	19980722	EP 1996-934064	19961003	<--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI					
WO 9749653	A2	19971231	WO 1997-US11035	19970624	<--
WO 9749653	A3	19980226			
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG					
AU 9735779	A1	19980114	AU 1997-35779	19970624	<--
US 6329139	B1	20011211	US 1997-912998	19970811	<--
US 6340588	B1	20020122	US 1998-51022	19980922	<--
PRIORITY APPLN. INFO.:			US 1995-428662	A2 19950425	<--
			US 1995-473660	A2 19950607	<--
			US 1995-480147	A2 19950607	<--
			US 1995-480196	A2 19950607	<--
			US 1995-484486	A2 19950607	<--
			US 1995-484504	A2 19950607	<--
			US 1995-538387	A2 19951003	<--
			US 1995-567746	A2 19951205	<--
			US 1996-639813	B2 19960402	<--
			WO 1996-US6145	A2 19960425	<--
			US 1996-633410	A2 19960610	<--
			US 1996-669252	A2 19960624	<--
			US 1995-184504	A2 19950607	<--

US 1996-20706P	P	19960624 <--
US 1996-711426	A2	19960905 <--
US 1996-709435	A2	19960906 <--
US 1996-723423	A	19960930 <--
WO 1996-US15999	W	19961003 <--
US 1996-726703	B2	19961007 <--
US 1996-743984	A2	19961028 <--
US 1996-741685	B2	19961031 <--
US 1997-857800	B2	19970122 <--
US 1997-826253	B2	19970327 <--
WO 1997-US11035	W	19970624 <--
US 1997-945053	B2	19971021 <--

AB The invention concerns combinations, called matrixes with memories, of matrix materials that are **encoded** with an optically readable **code** are provided. The matrix materials are those that are used in as supports in solid phase chemical and biochem. syntheses, immunoassays and hybridization reactions. The matrix materials may addnl. include fluophors or other luminescent moieties to produce luminescing matrixes with memories. The memories include electronic and optical **storage** media and also include optical memories, such as bar **codes** and other machine-readable **codes.** By virtue of this combination, mols. and biol. particles, such as phage and viral particles and cells, that are in proximity or in phys. contact with the matrix combination can be labeled by programming the memory with identifying information and can be identified by retrieving the **stored** information. Combinations of matrix materials, memories, and linked mols. and **biol. materials** are also provided. The combinations have a multiplicity of applications, including combinatorial chemical, isolation and purification of target macromols., capture and detection of macromols. for anal. purposes, selective removal of contaminants, enzymic catalysis, cell sorting, drug delivery, chemical modification and other uses. Methods for tagging mols., biol. particles and matrix support materials, immunoassays, receptor binding assays, scintillation proximity assays, non-radioactive proximity assays, and other methods are also provided. Diagrams describing the apparatus assembly are given.

REFERENCE COUNT: 114 THERE ARE 114 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 15 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:454233 HCAPLUS

TITLE: A review of radiation dosimetry applications using the MCNP Monte Carlo **code**

AUTHOR(S): Solberg, Timothy D.; DeMarco, John J.; Chetty, Indrin J.; Mesa, Albert V.; Cagnon, Christopher H.; Li, Alex N.; Mather, Kali K.; Medin, Paul M.; Arellano, Alonso R.; Smathers, James B.

CORPORATE SOURCE: Department of Radiation Oncology, UCLA School of Medicine, Los Angeles, CA, 90095-6951, USA

SOURCE: Radiochimica Acta (**2001**), 89(4-5), 337-355
CODEN: RAACAP; ISSN: 0033-8230

PUBLISHER: R. Oldenbourg Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The Monte Carlo **code** MCNP (Monte Carlo N-Particle) has a significant **history** dating to the early years of the Manhattan Project. More recently, MCNP has been used successfully to solve many

problems in the field of medical physics. In radiotherapy applications MCNP has been used successfully to calculate the bremsstrahlung spectra from medical linear accelerators, for modeling the dose distributions around high dose rate brachytherapy sources, and for evaluating the dosimetric properties of new radioactive sources used in intravascular irradiation for prevention of restenosis following angioplasty. MCNP has also been used for radioimmunotherapy and boron neutron capture therapy applications. It has been used to predict fast neutron activation of shielding and **biol. materials.** One area that holds tremendous clin. promise is that of radiotherapy treatment planning. In diagnostic applications, MCNP has been used to model X-ray computed tomog. and positron emission tomog. scanners, to compute the dose delivered from CT procedures, and to determine detector characteristics of nuclear medicine devices. MCNP has been used to determine particle fluxes around radiotherapy treatment devices and to perform shielding calcns. in radiotherapy treatment rooms. This manuscript is intended to provide to the reader a comprehensive summary of medical physics applications of the MCNP **code.**

REFERENCE COUNT: 109 THERE ARE 109 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 16 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:185949 HCAPLUS
DOCUMENT NUMBER: 134:204731
TITLE: Biological sampling system
INVENTOR(S): Armitage, Sharon May; Bowler, Desmond Daryl; Davis, Gerard Peter; Hetzel, David James Stuart
PATENT ASSIGNEE(S): Genetic Solutions Pty Ltd, Australia
SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2001018239	A1	20010315	WO 2000-AU1039		20000901 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
CA 2379479	AA	20010315	CA 2000-2379479		20000901 <--
EP 1210459	A1	20020605	EP 2000-955970		20000901 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL					
NZ 516589	A	20020828	NZ 2000-516589		20000901 <--
JP 2003508770	T2	20030304	JP 2001-521774		20000901 <--
AU 767822	B2	20031127	AU 2000-68112		20000901 <--
PRIORITY APPLN. INFO.:			AU 1999-2658	A	19990903 <--
			WO 2000-AU1039	W	20000901 <--

AB A device for collecting and **storing** a **biol.** **sample** for subsequent anal., comprising tamper-evident

storage means for **storing** said sample, said **storage** means being suitable for digestion together with said **biol. sample.**

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 17 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:17067 HCAPLUS
DOCUMENT NUMBER: 134:181220
TITLE: Distribution of stable isotopes of organic carbon in a section of Upper Quaternary Black Sea sediments
AUTHOR(S): Kodina, L. A.; Vlasova, L. N.
CORPORATE SOURCE: Inst. Geokhim. Anal. Khim. im. V. I. Vernadskogo, RAN, Moscow, 117975, Russia
SOURCE: Geokhimiya (**2000**), (11), 1209-1218
CODEN: GEOKAQ; ISSN: 0016-7525
PUBLISHER: MAIK Nauka/Interperiodica Publishing
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB Samples of bottom sediments in cores ≤ 2.2 m long, from 4 different localities, at different water depths in the Black Sea were studied. The sedimentation **history** of the Black Sea during the past 8-10 kyr is expressed in the composition of the samples. The contents of total organic C, carbonates, and water; values of the hydrogen **index** (HI) and the ratio of the hydrogen **index** to oxygen **index** (HI/OI); and δ13Corg values are given for various lithologies in sp. stratigraphic units of the studied sediment column. Also, TOC, HI, OI, and HI/OI ratio characteristics are given for **biol. material** (phytoplankton, coquina, shells, organic matter of shells) from Black Sea sediments or waters. The isotopic data almost completely coincide with the data in S. E. Calvert at al. (1987); however a different interpretation is proposed, based on the data obtained from organic matter pyrolysis. High HI values of sapropels with high δ13Corg exclude the possibility of marked amts. of terrigenous organic matter. 13C-enriched (δ13C to -23.5.permill.) sapropels with maximum organic C content (≤ 20%) formed during the periods of highest bioproductivity. An alternative source for isotopically light organic matter in the deep-water sediments is proposed: the origin of this organic matter is related to H2S contamination of the basin and biogeochem. activity in the seawater.

L15 ANSWER 18 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:547404 HCAPLUS
DOCUMENT NUMBER: 133:132095
TITLE: Matrices with memories and uses thereof
INVENTOR(S): Nova, Michael P.; Senyei, Andrew E.; Potash, Hanan
PATENT ASSIGNEE(S): Irori, USA
SOURCE: U.S., 89 pp., Cont.-in-part of Appl. No. PCT/US96/06145.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 20
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6100026	A	20000808	US 1996-633410	19960610 <--
US 5741462	A	19980421	US 1995-428662	19950425 <--

US 5925562 A 19990720 US 1995-480196 19950607 <--
US 6331273 B1 20011218 US 1995-473660 19950607 <--
US 6352854 B1 20020305 US 1995-480147 19950607 <--
US 6416714 B1 20020709 US 1995-484486 19950607 <--
US 5874214 A 19990223 US 1995-538387 19951003 <--
US 6025129 A 20000215 US 1995-567746 19951205 <--
WO 9636436 A1 19961121 WO 1996-US6145 19960425 <--
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN
US 6319668 B1 20011120 US 1996-669252 19960624 <--
US 6284459 B1 20010904 US 1996-711426 19960905 <--
US 5961923 A 19991005 US 1996-723423 19960930 <--
WO 9712680 A2 19970410 WO 1996-US15999 19961003 <--
WO 9712680 A3 19970821
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG
AU 9672573 A1 19970428 AU 1996-72573 19961003 <--
EP 853497 A2 19980722 EP 1996-934064 19961003 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI
US 6329139 B1 20011211 US 1997-912998 19970811 <--
US 6340588 B1 20020122 US 1998-51022 19980922 <--
PRIORITY APPLN. INFO.: US 1995-428662 A2 19950425 <--
US 1995-473660 A2 19950607 <--
US 1995-480147 A2 19950607 <--
US 1995-480196 A2 19950607 <--
US 1995-484486 A2 19950607 <--
US 1995-484504 A2 19950607 <--
US 1995-538387 A2 19951003 <--
US 1995-567746 A2 19951205 <--
US 1996-639813 B2 19960402 <--
WO 1996-US6145 A2 19960425 <--
US 1996-633410 A2 19960610 <--
US 1996-669252 A2 19960624 <--
US 1996-711426 A2 19960905 <--
US 1996-709435 A2 19960906 <--
US 1996-723423 A 19960930 <--
WO 1996-US15999 W 19961003 <--
US 1996-726703 B2 19961007 <--
US 1996-743984 A2 19961028 <--
US 1996-741685 B2 19961031 <--
US 1997-857800 B2 19970122 <--
US 1997-826253 B2 19970327 <--
US 1997-945053 B2 19971021 <--

AB Combinations, called matrixes with memories, of matrix materials that are **encoded** with an optically readable **code** are provided. The matrix materials are those that are used in as supports in solid phase chemical and biochem. syntheses, immunoassays and hybridization reactions. The matrix materials may addnl. include fluophors or other luminescent moieties to produce luminescing matrixes with memories. The memories

include electronic and optical **storage** media and also include optical memories, such as bar **codes** and other machine-readable **codes.** By virtue of this combination, mols. and biol. particles, such as phage and viral particles and cells, that are in proximity or in phys. contact with the matrix combination can be labeled by programming the memory with identifying information and can be identified by retrieving the **stored** information. Combinations of matrix materials, memories, and linked mols. and **biol. materials** are also provided. The combinations have a multiplicity of applications, including combinatorial chemical, isolation and purification of target macromols., capture and detection of macromols. for anal. purposes, selective removal of contaminants, enzymic catalysis, cell sorting, drug delivery, chemical modification and other uses. Methods for tagging mols., biol. particles and matrix support materials, immunoassays, receptor binding assays, scintillation proximity assays, non-radioactive proximity assays, and other methods are also provided.

REFERENCE COUNT: 120 THERE ARE 120 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 19 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:113036 HCAPLUS
DOCUMENT NUMBER: 132:163123
TITLE: Remotely programmable matrices with memories and uses thereof
INVENTOR(S): Nova, Michael P.; Senyei, Andrew E.; Parandoosh, Zahra; David, Gary S.
PATENT ASSIGNEE(S): Irori, USA
SOURCE: U.S., 67 pp., Cont.-in-part of U.S. 5,874,214. CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 20
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6025129	A	20000215	US 1995-567746	19951205 <--
US 5741462	A	19980421	US 1995-428662	19950425 <--
US 5925562	A	19990720	US 1995-480196	19950607 <--
US 6331273	B1	20011218	US 1995-473660	19950607 <--
US 6352854	B1	20020305	US 1995-480147	19950607 <--
US 6416714	B1	20020709	US 1995-484486	19950607 <--
US 5874214	A	19990223	US 1995-538387	19951003 <--
CA 2216645	AA	19961121	CA 1996-2216645	19960425 <--
WO 9636436	A1	19961121	WO 1996-US6145	19960425 <--
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN				
EP 822861	A1	19980211	EP 1996-916437	19960425 <--
EP 822861	B1	20031126		
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CN 1181720	A	19980513	CN 1996-193374	19960425 <--
JP 11511238	T2	19990928	JP 1996-530562	19960425 <--

AT 254965	E	20031215	AT 1996-916437	19960425 <--
AU 9659185	A1	19961129	AU 1996-59185	19960501 <--
AU 707444	B2	19990708		
US 6100026	A	20000808	US 1996-633410	19960610 <--
US 6319668	B1	20011120	US 1996-669252	19960624 <--
US 6284459	B1	20010904	US 1996-711426	19960905 <--
US 6017496	A	20000125	US 1996-709435	19960906 <--
US 5961923	A	19991005	US 1996-723423	19960930 <--
WO 9712680	A2	19970410	WO 1996-US15999	19961003 <--
WO 9712680	A3	19970821		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG				
AU 9672573	A1	19970428	AU 1996-72573	19961003 <--
EP 853497	A2	19980722	EP 1996-934064	19961003 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
US 6329139	B1	20011211	US 1997-912998	19970811 <--
US 6340588	B1	20020122	US 1998-51022	19980922 <--

PRIORITY APPLN. INFO.:	US 1995-428662	A2	19950425 <--
	US 1995-473660	A	19950607 <--
	US 1995-480147	A	19950607 <--
	US 1995-480196	A	19950607 <--
	US 1995-484486	A2	19950607 <--
	US 1995-484504	A	19950607 <--
	US 1995-538387	A2	19951003 <--
	US 1995-184504	A2	19950607 <--
	US 1995-567746	A	19951205 <--
	US 1996-639813	A	19960402 <--
	WO 1996-US6145	W	19960425 <--
	US 1996-633410	A2	19960610 <--
	US 1996-669252	A2	19960624 <--
	US 1996-711426	A2	19960905 <--
	US 1996-709435	A2	19960906 <--
	US 1996-723423	A	19960930 <--
	WO 1996-US15999	W	19961003 <--
	US 1996-726703	B2	19961007 <--
	US 1996-743984	A2	19961028 <--
	US 1996-741685	B2	19961031 <--
	US 1997-857800	B2	19970122 <--
	US 1997-826253	B2	19970327 <--
	US 1997-945053	B2	19971021 <--

AB Combinations, called matrixes with memories, of matrix materials with remotely addressable or remotely programmable recording devices that contain at least one data **storage** unit are provided. The matrix materials are those that are used as supports in solid phase chemical and biochem. syntheses, immunoassays and hybridization reactions. The matrix materials may addnl. include fluophors or other luminescent moieties to produce luminescing matrixes with memories. The data **storage** units are non-volatile antifuse memories or volatile memories, such as EEPROMS, DRAMS or flash memory. By virtue of this combination, mols. and biol. particles, such as phage and viral particles and cells, that are in proximity or in phys. contact with the matrix combination can be labeled by programming the memory with identifying information and can be identified by retrieving the **stored** information. Combinations

of matrix materials, memories, and linked mols. and **biol. materials** are also provided. The combinations have a multiplicity of applications, including combinatorial chemical, isolation and purification of target macromols., capture and detection of macromols. for anal. purposes, selective removal of contaminants, enzymic catalysis, cell sorting, drug delivery, chemical modification and other uses. Methods for electronically tagging mols., biol. particles and matrix support materials, immunoassays, receptor binding assays, scintillation proximity assays, non-radioactive proximity assays, and other methods are also provided.

REFERENCE COUNT: 233 THERE ARE 233 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 20 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:67423 HCAPLUS
DOCUMENT NUMBER: 132:119544
TITLE: Matrices with memories and uses thereof
INVENTOR(S): Nova, Michael P.; Parandoosh, Zahra; Senyei, Andrew E.; Xiao, Xiao-Yi; David, Gary S.; Satoda, Yozo; Zhao, Chanfeng; Potash, Hanan
PATENT ASSIGNEE(S): Irori, USA
SOURCE: U.S., 113 pp., Cont.-in-part of U.S. Ser. No. 711,426.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 20
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6017496	A	20000125	US 1996-709435	19960906 <--
US 5741462	A	19980421	US 1995-428662	19950425 <--
US 5925562	A	19990720	US 1995-480196	19950607 <--
US 6331273	B1	20011218	US 1995-473660	19950607 <--
US 6352854	B1	20020305	US 1995-480147	19950607 <--
US 6416714	B1	20020709	US 1995-484486	19950607 <--
US 5874214	A	19990223	US 1995-538387	19951003 <--
US 6025129	A	20000215	US 1995-567746	19951205 <--
WO 9636436	A1	19961121	WO 1996-US6145	19960425 <--
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN				
US 6319668	B1	20011120	US 1996-669252	19960624 <--
US 6284459	B1	20010904	US 1996-711426	19960905 <--
US 5961923	A	19991005	US 1996-723423	19960930 <--
WO 9712680	A2	19970410	WO 1996-US15999	19961003 <--
WO 9712680	A3	19970821		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG				
AU 9672573	A1	19970428	AU 1996-72573	19961003 <--

EP 853497 A2 19980722 EP 1996-934064 19961003 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI
WO 9749653 A2 19971231 WO 1997-US11035 19970624 <--
WO 9749653 A3 19980226
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RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
AU 9735779 A1 19980114 AU 1997-35779 19970624 <--
US 6329139 B1 20011211 US 1997-912998 19970811 <--
US 6340588 B1 20020122 US 1998-51022 19980922 <--
PRIORITY APPLN. INFO.: US 1995-428662 A2 19950425 <--
US 1995-184504 A2 19950607 <--
US 1995-473660 A2 19950607 <--
US 1995-480147 A2 19950607 <--
US 1995-480196 A2 19950607 <--
US 1995-484486 A2 19950607 <--
US 1995-538387 A2 19951003 <--
US 1995-567746 A2 19951205 <--
US 1996-639813 B2 19960402 <--
WO 1996-US6145 A2 19960425 <--
US 1996-669252 A2 19960624 <--
US 1996-711426 A2 19960905 <--
US 1995-484504 A2 19950607 <--
US 1996-633410 A2 19960610 <--
US 1996-20706P P 19960624 <--
US 1996-709435 A2 19960906 <--
US 1996-723423 A 19960930 <--
WO 1996-US15999 W 19961003 <--
US 1996-726703 B2 19961007 <--
US 1996-743984 A2 19961028 <--
US 1996-741685 B2 19961031 <--
US 1997-857800 B2 19970122 <--
US 1997-826253 B2 19970327 <--
WO 1997-US11035 W 19970624 <--
US 1997-945053 B2 19971021 <--

AB Combinations, called matrixes with memories, of matrix materials that are **encoded** with an optically readable **code** are provided. The matrix materials are those that are used in as supports in solid phase chemical and biochem. syntheses, immunoassays and hybridization reactions. The matrix materials may addnl. include fluorophors or other luminescent moieties to produce luminescing matrixes with memories. The memories include electronic and optical **storage** media and also include optical memories, such as bar **codes** and other machine-readable **codes.** By virtue of this combination, mols. and biol. particles, such as phage and viral particles and cells, that are in proximity or in phys. contact with the matrix combination can be labeled by programming the memory with identifying information and can be identified by retrieving the **stored** information. Combinations of matrix materials, memories, and linked mols. and **biol. materials** are also provided. The combinations have a multiplicity of applications, including combinatorial chemical, isolation and purification of target macromols., capture and detection of macromols. for anal. purposes,

selective removal of contaminants, enzymic catalysis, cell sorting, drug delivery, chemical modification and other uses. Methods for tagging mols., biol. particles and matrix support materials, immunoassays, receptor binding assays, scintillation proximity assays, non-radioactive proximity assays, and other methods are also provided. Scintillant-encased glass beads and chips were prepared and used in assays.

REFERENCE COUNT: 719 THERE ARE 719 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 21 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:62246 HCAPLUS
DOCUMENT NUMBER: 132:246888
TITLE: PCR-based gene synthesis as an efficient approach for expression of the A + T-rich malaria genome
AUTHOR(S): Withers-Martinez, Chrislaine; Carpenter, Elisabeth P.; Hackett, Fiona; Ely, Barry; Sajid, Mohammed; Grainger, Muni; Blackman, Michael J.
CORPORATE SOURCE: Division of Parasitology, Division of Protein Structure, National Institute for Medical Research, London, NW7 1AA, UK
SOURCE: Protein Engineering (**1999**), 12(12), 1113-1120
CODEN: PRENE9; ISSN: 0269-2139
PUBLISHER: Oxford University Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The A + T-rich genome of the human malaria parasite Plasmodium falciparum **encodes** genes of biol. importance that cannot be expressed efficiently in heterologous eukaryotic systems, owing to an extremely biased codon usage and the presence of numerous cryptic polyadenylation sites. In this work we have optimized an assembly polymerase chain reaction (PCR) method for the fast and extremely accurate synthesis of a 2.1 kb Plasmodium falciparum gene (pfsub-1) **encoding** a subtilisin-like protease. A total of 104 oligonucleotides, designed with the aid of dedicated computer software, were assembled in a single-step PCR. The assembly was then further amplified by PCR to produce a synthetic gene which has been cloned and successfully expressed in both Pichia **pastoris** and recombinant baculovirus-infected High Five cells. We believe this strategy to be of special interest as it is simple, accessible and has no limitation with respect to the size of the gene to be synthesized. Used as a systematic approach for the malarial genome or any other A + T-rich organism, the method allows the rapid synthesis of a nucleotide sequence optimized for expression in the system of choice and production of sufficiently large amts. of **biol. material** for complete mol. and structural characterization.

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 22 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:723208 HCAPLUS
DOCUMENT NUMBER: 131:319869
TITLE: Biochip for analytical and diagnostic purposes using a biological matrix with the reagent immobilized to a semifluid layer
INVENTOR(S): Bernauer, Hubert S.
PATENT ASSIGNEE(S): Biochip Technologies GmbH, Germany
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9957310	A2	19991111	WO 1999-EP2918	19990429 <--
WO 9957310	A3	20000309		

W: AE, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

DE 19819537	A1	20000316	DE 1998-19819537		19980430 <--
AU 9938252	A1	19991123	AU 1999-38252		19990429 <--
PRIORITY APPLN. INFO.:			DE 1998-19819537	A	19980430 <--
			WO 1999-EP2918	W	19990429 <--

AB The invention concerns a biochip that is inserted into an optical analyzer and is made of a support that carries at one side the anal. reagent immobilized to a winding semifluid layer, and is a Fresnel lens on the opposite side; the biochip further contains data **storage** units and an alignment system for positioning into the analyzer. Optionally, the biochip also contains optical gratings that correspond to the biomol. matrix. DNA, RNA, proteins, peptides, and saccharides are analyzed, also for diagnostic purposes. Samples are applied onto the biochip; distributed along the semifluid windings of the biomatrix reagent; and placed into the optical device for measurement by surface plasmon resonance. Data **storage** can be assigned to sample identification bar-**codes**; and to magnetic or electronic **storage.** The support is made of plastic; the winding semifluid layer, e.g. polymer brush, is formed on its surface. Analytes are fluorescent labeled before the anal. procedure.

L15 ANSWER 23 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:636045 HCAPLUS
DOCUMENT NUMBER: 131:269242
TITLE: Matrices with memories and uses thereof
INVENTOR(S): Nova, Michael P.; Parandoosh, Zahra; Senyei, Andrew E.; Xiao, Xiao Yi; David, Gary S.; Satoda, Yozo; Zhao, Chanfeng; Potash, Hanan
PATENT ASSIGNEE(S): Irori, USA
SOURCE: U.S., 119 pp., Cont.-in-part of U.S. Ser. No. 428,662. CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 20
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5961923	A	19991005	US 1996-723423	19960930 <--
US 5741462	A	19980421	US 1995-428662	19950425 <--
US 5925562	A	19990720	US 1995-480196	19950607 <--
US 6331273	B1	20011218	US 1995-473660	19950607 <--

US 6352854 B1 20020305 US 1995-480147 19950607 <--
US 6416714 B1 20020709 US 1995-484486 19950607 <--
US 5874214 A 19990223 US 1995-538387 19951003 <--
US 6025129 A 20000215 US 1995-567746 19951205 <--
WO 9636436 A1 19961121 WO 1996-US6145 19960425 <--
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN
US 6100026 A 20000808 US 1996-633410 19960610 <--
US 6319668 B1 20011120 US 1996-669252 19960624 <--
US 6284459 B1 20010904 US 1996-711426 19960905 <--
US 6017496 A 20000125 US 1996-709435 19960906 <--
WO 9712680 A2 19970410 WO 1996-US15999 19961003 <--
WO 9712680 A3 19970821
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG
AU 9672573 A1 19970428 AU 1996-72573 19961003 <--
EP 853497 A2 19980722 EP 1996-934064 19961003 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI
WO 9749653 A2 19971231 WO 1997-US11035 19970624 <--
WO 9749653 A3 19980226
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
AU 9735779 A1 19980114 AU 1997-35779 19970624 <--
US 6329139 B1 20011211 US 1997-912998 19970811 <--
US 6340588 B1 20020122 US 1998-51022 19980922 <--
PRIORITY APPLN. INFO.: US 1995-428662 A2 19950425 <--
US 1995-473660 A2 19950607 <--
US 1995-480147 A2 19950607 <--
US 1995-480196 A2 19950607 <--
US 1995-484486 A2 19950607 <--
US 1995-484504 A2 19950607 <--
US 1995-538387 A2 19951003 <--
US 1995-567746 A2 19951205 <--
US 1996-639813 A2 19960402 <--
WO 1996-US6145 A2 19960425 <--
US 1996-633410 A2 19960610 <--
US 1996-669252 A2 19960624 <--
US 1996-711426 A2 19960905 <--
US 1996-709435 A2 19960906 <--
US 1995-184504 A2 19950607 <--
US 1996-20706P P 19960624 <--
US 1996-723423 A 19960930 <--
WO 1996-US15999 W 19961003 <--

US 1996-726703	B2	19961007 <--
US 1996-743984	A2	19961028 <--
US 1996-741685	B2	19961031 <--
US 1997-857800	B2	19970122 <--
US 1997-826253	B2	19970327 <--
WO 1997-US11035	W	19970624 <--
US 1997-945053	B2	19971021 <--

AB Combinations, called matrixes with memories, of matrix materials that are **encoded** with an optically readable **code** are provided. The matrix materials are those that are used as supports in solid phase chemical and biochem. syntheses, immunoassays and hybridization reactions. The matrix materials may addnl. include fluophors or other luminescent moieties to produce luminescing matrixes with memories. The memories include electronic and optical **storage** media and also include optical memories, such as bar **codes** and other machine-readable **codes.** By virtue of this combination, mols. and biol. particles, such as phage and viral particles and cells, that are in proximity or in phys. contact with the matrix combination can be labeled by programming the memory with identifying information and can be identified by retrieving the **stored** information. Combinations of matrix materials, memories, and linked mols. and **biol. materials** are also provided. The combinations have a multiplicity of applications, including combinatorial chemical, isolation and purification of target macromols., capture and detection of macromols. for anal. purposes, selective removal of contaminants, enzymic catalysis, cell sorting, drug delivery, chemical modification and other uses. Methods for tagging mols., biol. particles and matrix support materials, immunoassays, receptor binding assays, scintillation proximity assays, non-radioactive proximity assays, and other methods are also provided. Ninety-six matrixes with memories were used to construct a 24-member peptide library by standard Fmoc peptide synthesis. An antibody generated to one of the peptides was used to study trends in binding to other members of the library.

REFERENCE COUNT: 113 THERE ARE 113 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 24 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:477929 HCAPLUS

DOCUMENT NUMBER: 131:254051

TITLE: Biochemical characterization of a lysosomal protease deficient in classical late infantile neuronal ceroid lipofuscinosis (LINCL) and development of an enzyme-based assay for diagnosis and exclusion of LINCL in human specimens and **animal** models

AUTHOR(S): Sohar, Istvan; Sleat, David E.; Jadot, Michel; Lobel, Peter

CORPORATE SOURCE: Center for Advanced Biotechnology and Medicine, Piscataway, NJ, 08854-5638, USA

SOURCE: Journal of Neurochemistry (**1999**), 73(2), 700-711
CODEN: JONRA9; ISSN: 0022-3042

PUBLISHER: Lippincott Williams & Wilkins

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Classical late-infantile neuronal ceroid lipofuscinosis (LINCL), a progressive and fatal neurodegenerative disease of childhood, results from mutations in a gene (CLN2) that **encodes** a protein with significant sequence similarity to prokaryotic pepstatin-insensitive acid

proteases. We have developed a sensitive protease activity assay that allows biochem. characterization of the CLN2 gene product in various human **biol. samples**, including solid tissues (brain and chorionic villi), blood (buffy coat leukocytes, platelets, granulocytes, and mononuclear cells), and cultured cells (lymphoblasts, fibroblasts, and amniocytes). The enzyme has a pH optimum of 3.5 and is rapidly inactivated at neutral pH. A survey of fibroblasts and lymphoblasts demonstrated that lack of activity was associated with LINCL arising from mutations in the CLN2 gene but not other neuronal ceroid lipofuscinoses (NCLs), including the CLN6 variant LINCL, classical infantile NCL, classical juvenile NCL, and adult NCL (Kufs' disease). A study conducted using blood samples collected from classical LINCL families whose affliction was confirmed by genetic anal. indicates that the assay can distinguish homozygotes, heterozygotes, and normal controls and thus is useful for diagnosis and carrier testing. Anal. of archival specimens indicates that several specimens previously classified as LINCL have enzyme activity and thus disease is unlikely to arise from mutations in CLN2. Conversely, a specimen previously classified as juvenile NCL lacks pepinase activity and is associated with mutations in CLN2. In addition, several **animals** with NCL-like neuro-degenerative symptoms [mutant strains of mice (nclf and mnd), English setter, border collie, and Tibetan terrier dogs, sheep, and cattle] were found to contain enzyme activity and are thus unlikely to represent models for classical LINCL. Subcellular fractionation expts. indicate that the CLN2 protein is located in lysosomes, which is consistent with its acidic pH optimum for activity and the presence of mannose 6-phosphate. Taken together, these findings indicate that LINCL represents a lysosomal **storage** disorder that is characterized by the absence of a specific protease activity.

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 25 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:248434 HCAPLUS
DOCUMENT NUMBER: 131:70496
TITLE: X-ray microscopy in Berkeley
AUTHOR(S): Meyer-Ilse, W.; Medecki, H.; Brown, J. T.; Heck, J. M.; Anderson, E. H.; Stead, A.; Ford, T.; Balhorn, R.; Petersen, C.; Magowan, C.; Attwood, D. T.
CORPORATE SOURCE: Center for X-ray Optics, Lawrence Berkeley National Laboratory, Berkeley, CA, 94720, USA
SOURCE: X-Ray Microscopy and Spectromicroscopy, Status Report from the International Conference, 5th, Wuerzburg, Germany, Aug. 19-23, 1996 (**1998**), Meeting Date 1996, 422-431. Editor(s): Thieme, Juergen. Springer: Berlin, Germany.
CODEN: 67EPAK
DOCUMENT TYPE: Conference; General Review; (computer optical disk)
LANGUAGE: English

AB A review with 27 refs. A new high resolution soft x-ray microscope (XM-1) has been used in a variety of applications. It is a conventional transmission microscope with a zone plate condenser and objective. A mutual **indexing** system incorporates state-of-the-art visible light microscopy and precise positioning of samples. XM-1 has a spatial resolution of 43 nm, as measured with a knife edge object, using the 10% to 90% intensities. It is used in collaboration with other groups to investigate variety of mostly **biol. samples.** In our most extensive study, the life cycle of malaria parasites (Plasmodium falciparum) in intact human red blood cells was mapped. Abnormalities in the parasites development with protease inhibitor treatments and membrane

protein deficiencies have been investigated and were linked to parasite mortality. New structures in green alga (Chlamydomonas), uniquely visible with soft X-rays, have been confirmed and analyzed in unfixed samples. In addition XM-1 is used to map the morphol. variation of genetically altered sperm cells. We also give a brief introduction of the **history** of x-ray microscopy.

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 26 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:136747 HCAPLUS
DOCUMENT NUMBER: 130:165143
TITLE: Remotely programmable matrixes with memories with applications to biological processes
INVENTOR(S): Nova, Michael P.; Senyei, Andrew E.
PATENT ASSIGNEE(S): IRORI, USA
SOURCE: U.S., 56 pp., Cont.-in-part of U.S. Ser. No. 480,147.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 20
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5874214	A	19990223	US 1995-538387	19951003 <--
US 5741462	A	19980421	US 1995-428662	19950425 <--
US 5925562	A	19990720	US 1995-480196	19950607 <--
US 6331273	B1	20011218	US 1995-473660	19950607 <--
US 6352854	B1	20020305	US 1995-480147	19950607 <--
US 6416714	B1	20020709	US 1995-484486	19950607 <--
US 6025129	A	20000215	US 1995-567746	19951205 <--
CA 2216645	AA	19961121	CA 1996-2216645	19960425 <--
WO 9636436	A1	19961121	WO 1996-US6145	19960425 <--
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN				
EP 822861	A1	19980211	EP 1996-916437	19960425 <--
EP 822861	B1	20031126		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI				
CN 1181720	A	19980513	CN 1996-193374	19960425 <--
JP 11511238	T2	19990928	JP 1996-530562	19960425 <--
AT 254965	E	20031215	AT 1996-916437	19960425 <--
AU 9659185	A1	19961129	AU 1996-59185	19960501 <--
AU 707444	B2	19990708		
US 6100026	A	20000808	US 1996-633410	19960610 <--
US 6319668	B1	20011120	US 1996-669252	19960624 <--
US 6284459	B1	20010904	US 1996-711426	19960905 <--
US 6017496	A	20000125	US 1996-709435	19960906 <--
US 5961923	A	19991005	US 1996-723423	19960930 <--
WO 9712680	A2	19970410	WO 1996-US15999	19961003 <--
WO 9712680	A3	19970821		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT,				

RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN,
AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG

AU 9672573	A1	19970428	AU 1996-72573		19961003 <--
EP 853497	A2	19980722	EP 1996-934064		19961003 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE , FI					
US 6329139	B1	20011211	US 1997-912998		19970811 <--
US 6340588	B1	20020122	US 1998-51022		19980922 <--
PRIORITY APPLN. INFO.:			US 1995-428662	A2	19950425 <--
			US 1995-473660	A	19950607 <--
			US 1995-480147	A2	19950607 <--
			US 1995-480196	A	19950607 <--
			US 1995-484486	A	19950607 <--
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			US 1995-184504	A2	19950607 <--
			US 1995-538387	A2	19951003 <--
			US 1995-567746	A	19951205 <--
			US 1996-639813	A	19960402 <--
			WO 1996-US6145	W	19960425 <--
			US 1996-633410	A2	19960610 <--
			US 1996-669252	A2	19960624 <--
			US 1996-711426	A2	19960905 <--
			US 1996-709435	A2	19960906 <--
			US 1996-723423	A	19960930 <--
			WO 1996-US15999	W	19961003 <--
			US 1996-726703	B2	19961007 <--
			US 1996-743984	A2	19961028 <--
			US 1996-741685	B2	19961031 <--
			US 1997-857800	B2	19970122 <--
			US 1997-826253	B2	19970327 <--
			US 1997-945053	B2	19971021 <--

AB Combinations, called matrixes with memories, of matrix materials with remotely addressable or remotely programmable recording devices that contain at least one data **storage** unit are provided. The matrix materials are those that are used in as supports in solid phase chemical and biochem. syntheses, immunoassays and hybridization reactions. The data **storage** units are non-volatile antifuse memories or volatile memories, such as EEPROMS, DRAMS or flash memory. By virtue of this combination, mols. and biol. particles, such as phage and viral particles and cells, that are in proximity or in phys. contact with the matrix combination can be labeled by programming the memory with identifying information and can be identified by retrieving the **stored** information. Combinations of matrix materials, memories, and linked mols. and **biol. materials** are also provided. The combinations have a multiplicity of applications, including combinatorial chemical, isolation and purification of target macromols., capture and detection of macromols. for anal. purposes, selective removal of contaminants, enzymic catalysis, cell sorting, drug delivery, chemical modification and other uses. Methods for electronically tagging mols., biol. particles and matrix support materials, immunoassays, receptor binding assays, and other methods are also provided.

REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 27 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:85453 HCAPLUS

TITLE: Spectral imaging in a programmable array microscope by Hadamard transform fluorescence spectroscopy
AUTHOR(S): Hanley, Quentin S.; Verveer, Peter J.; Jovin, Thomas M.
CORPORATE SOURCE: Department of Molecular Biology, Max Planck Institute for Biophysical Chemistry, Gittingen, D-37077, Germany
SOURCE: Applied Spectroscopy (**1999**), 53(1), 1-10
CODEN: APSPA4; ISSN: 0003-7028
PUBLISHER: Society for Applied Spectroscopy
DOCUMENT TYPE: Journal
LANGUAGE: English

AB We report the use of a thin-film **transistor** (TFT) twisted nematic liquid crystal spatial light modulator (SLM) for Hadamard transform two-dimensional spectral imaging in a fluorescence microscope. The liquid crystal SLM placed in the primary image plane of the microscope generates a set of spatial **encoding** masks defined by a cyclic S-matrix. The light passing through the mask is relayed by anamorphic optics to the entrance of an imaging spectrograph and detected with a charge-coupled device (CCD) camera. The SLM allows for the convenient generation of arbitrary masks without moving parts. The Hadamard transform approach transmits up to 50% of the light from the image field for multichannel detection, but is subject to transmission losses in the SLM. The system allows the convenient acquisition of two-dimensional spectral images. We characterized and tested many of the parameters controlling both spatial and spectral resolution, and demonstrated the system in the anal. of both naturally fluorescing and stained **biol. samples.**

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 28 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:728583 HCAPLUS
DOCUMENT NUMBER: 129:327993
TITLE: Recombinant bacterial adhesin-antigen fusion proteins for hemagglutination assays
INVENTOR(S): Duenas Porto, Marta G.; Ayala Avila, Marta; Gavilondo Cowley, Jorge V.; Freyre Almeida, Freya M.; Bell Garcia, Hansell
PATENT ASSIGNEE(S): Entro de Ingenieria Genetica y Biotecnologia (CIG B), Cuba
SOURCE: PCT Int. Appl., 24 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Spanish
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9849327	A1	19981105	WO 1998-CU5	19980427 <--
W: AU, CA, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2288348	AA	19981105	CA 1998-2288348	19980427 <--
AU 9870277	A1	19981124	AU 1998-70277	19980427 <--
AU 741043	B2	20011122		
EP 978564	A1	20000209	EP 1998-916797	19980427 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRIORITY APPLN. INFO.: CU 1997-47 A 19970428 <--

WO 1998-CU5 W 19980427 <--

AB The present invention relates to the field of biotechnol., particularly to the development of recombinant fusion proteins based on bacterial adhesins and their use in hemagglutination assays for the specific detection of antibodies or antigens in the blood and other **biol. samples.** The use of adhesion proteins F41 and PagG of Escherichia coli as fusion protein component enhances expression of the recombinant fusion protein in E. coli and eliminates potential problems of toxicity. Plasmids **encoding** PapG or adhesin F41 fusion with HIV-1 gp41 peptide were created. The proteins were prepared with E. coli transformed with these plasmids. The recombinant fusion proteins were used in a hemagglutination assay for anti-HIV-1 antibodies in human blood.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 29 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:509297 HCAPLUS
DOCUMENT NUMBER: 129:132231
TITLE: Cloning, sequence, and therapeutic use of Human lysosomal sialidase
INVENTOR(S): Potier, Michel; Pshezhetsky, Alexey V.
PATENT ASSIGNEE(S): Hopital Sainte-Justine, Can.
SOURCE: PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9831817	A2	19980723	WO 1998-CA26	19980113 <--
WO 9831817	A3	19980911		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9855468	A1	19980807	AU 1998-55468	19980113 <--

PRIORITY APPLN. INFO.: US 1997-35092P P 19970114 <--
WO 1998-CA26 W 19980113 <--

AB The present invention relates to the identification of a complete cDNA **coding** for human lysosomal sialidase, its cloning, sequencing and expression, and to the identification of mutations found in sialidosis patients and chromosomal mapping of the sialidase gene to chromosome 6. There is provided a human lysosomal sialidase **encoded** by the DNA sequence set forth in SEQ ID NO:1 and having the amino acid sequence depicted in SEQ ID NO:2. There is also provided a method of mutations anal. in patients affected with sialidosis or similar diseases, which comprises the steps of: (a) isolating DNA from a **biol. sample** of said patients; (b) comparing the DNA of step (a) with the DNA of the present invention to determine the presence of any mutation, whereby the presence of a mutation is indicative of sialidosis or similar diseases. The sialidase can be used to treat lysosomal **storage** diseases such as sialidosis, Tay-Sachs, and Sandhoff diseases.

L15 ANSWER 30 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:354373 HCAPLUS
DOCUMENT NUMBER: 129:106166
TITLE: Correction of the internal absorption effect in fluorescence emission and excitation spectra from absorbing and highly scattering media: theory and experiment
AUTHOR(S): Zhadin, N. N.; Alfano, R. R.
CORPORATE SOURCE: Department of Physics, New York State Center for Advanced Technology for Ultrafast Photonic, New York, NY, 10031, USA
SOURCE: Journal of Biomedical Optics (**1998**), 3(2), 171-186
CODEN: JBOPFO; ISSN: 1083-3668
PUBLISHER: SPIE-The International Society for Optical Engineering
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Fluorescence spectra measured from **biol. samples**, such as tissues or cell suspensions, are usually **distorted** due to the light absorption by intrinsic chromophores. These **distortions** are aggravated by strong scattering of light inside the samples. A new method is described for a fast correction of these spectral **distortions**, using only steady-state spectroscopic measurements. The method is based on the formulas derived from a simplified photon diffusion model, in the isotropic one-dimensional approximation applied to a semi-infinite, highly scattering, and moderately absorbing medium with a refractive-**index**-matched boundary. The formulas describe the spectral **distortions** of the fluorescence emission and excitation spectra, together with the diffuse reflectance spectrum, as the functions of one spectral characteristic of the medium, the darkness, which is the ratio of absorption coefficient and reduced scattering coefficient The algorithm does not involve any iterative procedures, and offers a direct, simple, and fast method for real-time spectral correction. The true fluorescence emission or excitation spectrum is directly calculated from a pair of exptl. spectra: the fluorescence emission or excitation spectrum and the diffuse reflectance spectrum, measured from the same position on a sample. The correction produces the profile of the true fluorescence spectrum, the same as the one measured from the corresponding sample with an infinitely low absorption and no scattering. The **restoration** of the spectral profiles of true fluorescence emission and excitation spectra was tested exptl., using highly scattering phantoms with a fluorescent dye and a deliberately added nonfluorescent dye producing strong inner-filter **distortions.**
REFERENCE COUNT: 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 31 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:233476 HCAPLUS
DOCUMENT NUMBER: 128:304881
TITLE: Applications of LC/MS in forensic chemistry
AUTHOR(S): Nishikawa, Mayumi; Tsuchihashi, Hitoshi
CORPORATE SOURCE: Forensic Science Laboratory, Osaka Prefectural Police H. Q., Osaka, 541, Japan
SOURCE: Journal of Toxicology, Toxin Reviews (**1998**), 17(1), 13-26
CODEN: JTTRD9; ISSN: 0731-3837
PUBLISHER: Marcel Dekker, Inc.
DOCUMENT TYPE: Journal

LANGUAGE: English
AB Various anal. techniques for highly sensitive liquid chromatog. / mass spectrometry (LC/MS) and their applications in forensic chemical have been investigated. The following three types of LC/MS instruments were used for this study: (1) a Micromass model PLATFORM II equipped with an atmospheric pressure chemical ionization (APCI) or an electrospray ionization (ESI) interface; (2) a Shimadzu model QP-1100EX combined with a thermospray TSP interface; (3) a JEOL model JMS-SX102A fitted with a Frit - fast atom bombardment ionization (Frit-FAB) interface. Optimization of capillary voltage and the flow rate of the mobile phase were found for ESI-LC/MS. The relationship between the composition of mobile phase and ionization efficiency was investigated in the ESI, APCI and TSP types of LC/MS. In ESI-LC/MS anal., the use of a semi-micro column (1.5 mm I.D.) allowed about ten times more sensitive an anal. than a conventional column (4.6 mm I.D.). In order to examine the provable period of triazolam, which is quickly metabolized, urine samples obtained from four volunteers who had taken 0.25 or 0.5 mg of the drug were analyzed by TSP-LC/MS. The main urinary metabolite of triazolam, α-hydroxytriazolam (α-HT) was detectable up to 36 h after taking the dosage. For the purpose of checking the detectable period of suxamethonium in post-mortem **biol. samples**, Frit-FAB LC/MS anal. was performed for the tissue samples of the rats which died by the i.p. administration of the drug at 10 mg/kg bodyweight. Suxamethonium in the rat liver was detectable up to 42 days later, as long as the bodies were **stored** at 0°C immediately after the death.
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 32 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1997:404430 HCAPLUS
DOCUMENT NUMBER: 127:38780
TITLE: The biological exposure indices: a key component in protecting workers from toxic chemicals
AUTHOR(S): Morgan, Michael S.
CORPORATE SOURCE: Department of Environmental Health, University of Washington, Seattle, WA, 98195-7234, USA
SOURCE: Environmental Health Perspectives Supplements (**1997**), 105(1), 105-115
CODEN: EHPSEO; ISSN: 1078-0475
PUBLISHER: National Institute of Environmental Health Sciences
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review with 63 refs. Biol. monitoring of exposure to chems. in the workplace is an important component of exposure assessment and prevention of adverse health effects. It should be employed in conjunction with ambient air monitoring to provide information on the absorbed dose of a chemical agent and the effect of all routes of exposure. Judgments regarding the acceptable level of a chemical or its metabolite in **biol. samples** are facilitated by comparison to a reference value. The American Conference of Governmental Industrial Hygienists has established a series of recommended reference values called the Biol. Exposure **Indexes** (BEI). The **history** and characteristics of the BEI are reviewed, and their suitability for use by occupational health specialists is examined A number of challenges and stimuli to the continued development and improvement of these reference values are described, and the impact of recent advances in macromol. biol. is assessed.
REFERENCE COUNT: 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 33 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1997:388858 HCAPLUS
DOCUMENT NUMBER: 127:118329
TITLE: DNA typing in forensic medicine and in criminal investigations. A current survey
AUTHOR(S): Benecke, Mark
CORPORATE SOURCE: Institut Rechtsmedizin, Universitat Koln, Cologne, D-50823, Germany
SOURCE: Naturwissenschaften (**1997**), 84(5), 181-188
CODEN: NATWAY; ISSN: 0028-1042
PUBLISHER: Springer
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review is given with 100 refs. Since 1985 DNA typing of **biol. material** has become one of the most powerful tools for personal identification in forensic medicine and in criminal investigations. Classical DNA "fingerprinting" is increasingly being replaced by polymerase chain reaction (PCR) based technol. which detects very short polymorphic stretches of DNA. DNA loci which forensic scientists study do not **code** for proteins, and they are spread over the whole genome. These loci are neutral, and few provide any information about individuals except for their identity. Minute amts. of **biol. material** are sufficient for DNA typing. Many European countries are beginning to establish databases to **store** DNA profiles of crime scenes and known offenders. The past and present DNA typing and the establishment of forensic DNA databases in Europe is overviewed..

L15 ANSWER 34 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1997:365388 HCAPLUS
DOCUMENT NUMBER: 126:339749
TITLE: Five cases of forensic short tandem repeat DNA typing
AUTHOR(S): Schmitt, Cornelia; Benecke, Mark
CORPORATE SOURCE: Institut fur Rechtsmedizin der Universitat zu Koln, Koln, 50823, Germany
SOURCE: Electrophoresis (**1997**), 18(5), 690-694
CODEN: ELCTDN; ISSN: 0173-0835
PUBLISHER: Wiley-VCH
DOCUMENT TYPE: Journal
LANGUAGE: English
AB In medicolegal samples DNA is often broken into fragments. In many cases, only the amplification of short tandem repeated DNA stretches (STRs), which are located in **noncoding** regions, allows DNA typing of such degraded materials. To demonstrate the high diversity of **biol. materials** which forensic biologists have to deal with, and to outline the success rates and limits of the method, the authors describe five cases (minute amount of tissue on barrel, tissue in decay, tumor tissue, sperm after multiple rape, **stored** urine samples) in which forensic DNA typing was successfully performed by use of the short tandem repeats HUMDHFRP2, HUMD8S306, HUMCD4, HUMF13A1, HUMTH01, HUMVWA, and HUMFES.
REFERENCE COUNT: 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 35 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1997:362025 HCAPLUS
DOCUMENT NUMBER: 126:339706
TITLE: Biological monitoring of experimental human exposure to trimethylbenzene
AUTHOR(S): Kostrzewski, Przemyslaw; Wiaderna-Brycht, Anna;

Czerski, Bogdan
CORPORATE SOURCE: Department of Biological Monitoring, Institute of Occupational Medicine, Lodz, Pol.
SOURCE: Science of the Total Environment (**1997**), 199(1,2), 73-81
CODEN: STENDL; ISSN: 0048-9697
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Trimethylbenzene (TMB) is a component of numerous com. prepns. of organic solvents (Farbasol, Solvesso, Shellsol) used in the chemical, plastics, printing and other industries. TMB is a mixture of three isomers (pseudocumene-1,2,4-TMB; mesitylene-1,3,5-TMB; hemimellitene-1,2,3-TMB). The proportion of individual isomers in the mixture differs. The aim of this study was to obtain toxicokinetic data on the absorption and elimination of trimethylbenzene and its metabolites in biol. fluids and to investigate the relationship between the biol. **indexes** of exposure and the absorbed dose. Eight-hour inhalation tests were performed in a toxicol. chamber. The subjects were eight volunteers aged 20-39 with no **history** of exposure to TMB. They were exposed to pseudocumene, mesitylene or hemimellitene at concns. ranging from 5 to 150 mg/m3 air. Exhaled air, capillary blood and urine samples were collected before, during and after the exposure. The detns. of TMB or its metabolites were performed using gas chromatog. (HP 5890 II Plus, MSD, FID). Pulmonary ventilation in the volunteers ranged from 0.56 to 1.0 m3/h. The retention of 1,2,4-TMB; 1,3,5-TMB; 1,2,3-TMB in the lungs was 68%, 67% and 71%, resp. The elimination of TMB from capillary blood occurred in accordance with the open three-compartment model. Urinary excretion of dimethylbenzoic acids (DMBA) proceeded according to the open two-compartment model. Based on the toxicokinetic data, a simulation model of accretion and excretion of DMBA in urine during a 14-day period was developed. The highest rates of metabolite excretion and the highest quantities of DMBA in urine during 24-h intervals were observed on day 5 of exposure. The relationship between the levels of TMB or DMBA in **biol. material** and TMB air concentration or absorbed dose were determined To select the urine fraction suitable for determining occupational TMB exposure limit (BEL) for TMB has been proposed, with the current maximum allowable concentration (MAC) value of 100 mg/m3 (Polish standard) baseline value.

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 36 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1997:332426 HCAPLUS
DOCUMENT NUMBER: 126:303463
TITLE: Matrixes with memories, sensors with memories and uses thereof
INVENTOR(S): Nova, Michael P.; Potash, Hanan; Xiao, Xioa-yi; Sargent, Bradley J.; Parandoosh, Zahra; David, Gary S.
PATENT ASSIGNEE(S): Irori, USA; Nova, Michael P.; Potash, Hanan; Xiao, Xioa-Yi; Sargent, Bradley J.; Parandoosh, Zahra; David, Gary S.
SOURCE: PCT Int. Appl., 321 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 20
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE	
WO 9712680	A2	19970410	WO 1996-US15999		19961003	<--
WO 9712680	A3	19970821				
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM						
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG						
US 5874214	A	19990223	US 1995-538387		19951003	<--
US 6025129	A	20000215	US 1995-567746		19951205	<--
US 6100026	A	20000808	US 1996-633410		19960610	<--
US 6319668	B1	20011120	US 1996-669252		19960624	<--
US 6284459	B1	20010904	US 1996-711426		19960905	<--
US 6017496	A	20000125	US 1996-709435		19960906	<--
US 5961923	A	19991005	US 1996-723423		19960930	<--
AU 9672573	A1	19970428	AU 1996-72573		19961003	<--
EP 853497	A2	19980722	EP 1996-934064		19961003	<--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI						
US 6329139	B1	20011211	US 1997-912998		19970811	<--
PRIORITY APPLN. INFO.:			US 1995-538387	A	19951003	<--
			US 1995-567746	A	19951205	<--
			US 1996-639813	A	19960402	<--
			US 1996-633410	A	19960610	<--
			US 1996-669252	A	19960624	<--
			US 1996-711426	A	19960905	<--
			US 1996-709435	A	19960906	<--
			US 1996-723423	A	19960930	<--
			US 1995-428662	A2	19950425	<--
			US 1995-184504	A2	19950607	<--
			US 1995-473660	A	19950607	<--
			US 1995-480147	A2	19950607	<--
			US 1995-480196	A	19950607	<--
			US 1995-484486	A	19950607	<--
			US 1995-484504	A2	19950607	<--
			WO 1996-US6145	A2	19960425	<--
			WO 1996-US15999	W	19961003	<--
			US 1996-726703	B2	19961007	<--
			US 1996-743984	A2	19961028	<--
			US 1996-741685	B2	19961031	<--
			US 1997-857800	B2	19970122	<--
			US 1997-826253	B2	19970327	<--
			US 1997-945053	B2	19971021	<--

AB Combinations, called matrixes with memories, of matrix materials that are **encoded** with an optically readable **code** are provided. The matrix materials are those that are used in as supports in solid phase chemical and biochem. syntheses, immunoassays, and hybridization reactions. The matrix materials may addnl. include fluophors or other luminescent moieties to produce luminescing matrixes with memories. The memories include electronic and optical **storage** media and also include optical memories, such as bar **codes** and other machine-readable **codes.** By virtue of this combination, mols. and biol. particles, such as phage and viral particles and cells, that are in proximity or in phys. contact with the matrix combination can be labeled by programming the memory with identifying information and can be identified by

retrieving the **stored** information. Combinations of matrix materials, memories, and linked mols. and **biol. materials** are also provided. The combinations have a multiplicity of applications, including combinatorial chemical, isolation and purification of target macromols., capture and detection of macromols. for anal. purposes, selective removal of contaminants, enzymic catalysis, cell sorting, sensors and drug delivery, chemical modification, and other uses. Methods for tagging mols., biol. particles and matrix support materials, immunoassays, receptor binding assays, scintillation proximity assays, nonradioactive proximity assays, and other methods are also provided. Sensors containing a memory in combination with a matrix are also provided.

L15 ANSWER 37 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1995:523624 HCAPLUS
DOCUMENT NUMBER: 122:258103
TITLE: The detection of opiate drugs in nontraditional specimens (clothing): A report of ten cases
AUTHOR(S): Tracqui, Antoine; Kintz, Pascal; Ludes, Bertrand; Jamey, Carole; Mangin, Patrice
CORPORATE SOURCE: Institut de Medecine Legale, Faculte de Medecine de Strasbourg, Strasbourg, Fr.
SOURCE: Journal of Forensic Sciences (**1995**), 40(2), 263-5
CODEN: JFSCAS; ISSN: 0022-1198
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The authors present a series of 10 fatalities involving opiate overdosage, in which morphine, **codeine**, and 6-monoacetylmorphine were identified and quantified, not only in postmortem **biol. samples**, but also in pieces of underwear taken from the bodies. Small tissue samples (about 1 g) were cut off from several parts of the underwear, **stored** at ambient temperature until anal., then extracted by agitation in a mixture of chloroform/2-propanol/n-heptane (60:14:26, volume/volume/v) and assayed using GC/MS in the single ion monitoring mode. Morphine, **codeine** and 6-monoacetylmorphine concns. were in the range 0.02 to 9.27 μg/g. These results indicate that the impregnation of underwear by sweat and sebaceous secretions and/or urine provides detectable levels of the drugs excreted by these ways. Even in the absence of **biol. samples**, assaying pieces of clothing may bring some evidence about the drug abuser status of their owner.

L15 ANSWER 38 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1994:574571 HCAPLUS
DOCUMENT NUMBER: 121:174571
TITLE: Blood reference material for erythrocyte protoporphyrin (EP)
AUTHOR(S): Wu, Yiqun; Lu, Yanfei; Tang, Xiaoyong; Li, Chunling; et al.
CORPORATE SOURCE: Inst. Occupational Med., Chinese Acad. Preventive Med., Beijing, 100050, Peop. Rep. China
SOURCE: Weisheng Yanjiu (**1994**), 23(3), 129-32
CODEN: WEYAEM; ISSN: 1000-8020
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB Erythrocyte protoporphyrin (EP) in human blood is a sensitive biol. **index** used to evaluate lead exposure and anemia resulting from the shortage of Fe in blood. In order to get accurate and reliable results of EP in blood. It is necessary to develop and apply EP reference material whose

matrix is the same as that of blood sample during determination A protocol is described for the preparation and characterization of a reference material containing low and high concentration of EP from bovine spiked with standard solution of EP. The spiked bovine blood was homogenized, distributed to vials of 3.0 mL with 1.0 mL spiked bovine blood, and then lyophilized. The interval and intravial homogeneity, **storage** stability and values of low and high concns. of EP reference material were ascertained by determining the spiked bovine in randomly selected vials by nine labs. using the national standard method which had been evaluated and validated for detection limit, precision and accuracy. The results showed that the characteristics of EP reference material such as homogeneity, **storage** stability, and level of certification were satisfied with the requirement of national primary reference material.

L15 ANSWER 39 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1993:187880 HCAPLUS
DOCUMENT NUMBER: 118:187880
TITLE: Competitive inhibition of abscisic acid-regulated gene expression by stereoisomeric acetylenic analogs of abscisic acid
AUTHOR(S): Wilen, Ronald W.; Hays, Dirk B.; Mandel, Roger M.; Abrams, Suzanne R.; Moloney, Maurice M.
CORPORATE SOURCE: Dep. Biol. Sci., Univ. Calgary, Calgary, AB, T2N 1N4, Can.
SOURCE: Plant Physiology (**1993**), 101(2), 469-76
CODEN: PLPHAY; ISSN: 0032-0889
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The properties of two enantiomeric synthetic acetylenic abscisic acid (ABA) analogs (PBI-51 and PBI-63) in relation to ABA-sensitive gene expression are reported. Using microspore-derived embryos of Brassica napus as the **biol. material** and their responsiveness to ABA in the expression of genes **encoding storage** proteins as a quant. bioassay, the biol. activities of PBI-51 and PBI-63 were examined Assays to evaluate agonistic activity of either compound applied individually showed a dose-dependent increase in napin gene expression on application of PBI-63. Maximal activity of about 40 μm indicated that PBI-63 was an agonist, although somewhat weaker than ABA. PBI-63 has a similar stereochem. to natural ABA at the junction of the ring and side chain. In contrast, PBI-51 showed no agonistic effects until applied at 40 to 50 μm. Even then, the response was fairly weak. PBI-51 has the opposite stereochem. to natural ABA at the junction of the ring and side chain. When applied concurrently with ABA, PBI-63 and PBI-51 had distinctly different properties. PBI-63 (40 μM) and ABA (5 μM) combined gave results similar to the application of either compound sep. with high levels of induction of napin expression. PBI-51 displayed a reversible antagonistic effect with ABA, shifting the typical ABA dose-response curve by a factor of 4 to 5. This antagonism was noted for the expression of two ABA-sensitive genes, napin and oleosin. To test whether this antagonism was at the level of ABA recognition or uptake, ABA uptake was monitored in the presence of PBI-51 or PBI-63. Neither compound decreased ABA uptake. Treatments with either PBI-51 or PBI-63 showed an effect on endogenous ABA pools by permitting increases of 5- to 7-fold. It is hypothesized that this increase occurs because of competition for ABA catabolic enzymes by both compds. The fact that ABA pools did not decrease in the presence of PBI-51 suggests that PBI-51 must exert its

antagonistic properties through direct competition with ABA at a hormone-recognition site.

L15 ANSWER 40 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1991:498747 HCAPLUS
DOCUMENT NUMBER: 115:98747
TITLE: Macroinvertebrate biomonitoring and water quality management within urban catchments
AUTHOR(S): Bascombe, A. D.; Ellis, J. B.; Revitt, D. M.; Shutes, R. B. E.
CORPORATE SOURCE: Urban Pollut. Res. Cent., Middlesex Polytech., Queensway/Enfield, EN3 4SF, UK
SOURCE: IAHS Publication (**1990**), 198(Hydrol. Processes Water Manage. Urban Areas), 209-16
CODEN: IAPUEP; ISSN: 0144-7815
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Data from water sampling sites established along Salmon's Brook (a tributary of the River Lee, northeast London, England), representing sites of increasing urbanization, road runoff, industrial and urban runoff, and combined or **storm** sewer overflow, included **biol. samples** and anal. of metals (especially Cd, Cu, Pb, and Zn) from several species (e.g., Asellus aquaticus, Gammarus pulex, and Limnaea peregra). These benthic macroinvertebrates, when used with an appropriate scoring and evaluation system, can be used for monitoring metal pollution, especially for the disappearance of a species (e.g., Sialic or Dytiscus) because of a critical level of metal pollution. Overall species richness decreased from 15 (in rural areas) to 7 (after several types of discharge). Metal uptake in A. aquaticus (measured by average tissue metal concns.) remained relatively constant in upstream samples but increased dramatically when sampled below the sewage outfall, with Zn reaching an average concentration of 373 μg/g. Formulation of a hydrobiol. **index** correlating metal content in the macroinvertebrates with metal pollution would add flexibility to a water quality management program.

L15 ANSWER 41 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1985:176629 HCAPLUS
DOCUMENT NUMBER: 102:176629
TITLE: NMR imaging
PATENT ASSIGNEE(S): Shimadzu Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60012043	A2	19850122	JP 1983-118793	19830630 <--
JP 04002251	B4	19920117		
PRIORITY APPLN. INFO.:			JP 1983-118793	19830630 <--

AB A method for NMR imaging by 2-dimensional Fourier transform using a spin-**distortion** method involves (1) successively increasing the field strength for determining the amount of phase **encoding** from 0 to acquire data for each field strength and (2) obtaining an image from the low-frequency components of the data by Fourier transform. The imaging time is decreased.

L15 ANSWER 42 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1983:103947 HCAPLUS
DOCUMENT NUMBER: 98:103947
TITLE: Low-temperature preservation of **biological materials**
INVENTOR(S): Oehme, Peter; Hackensellner, Hans A.; Matthes, Gert; Jentzsch, Klaus Dieter
PATENT ASSIGNEE(S): Akademie der Wissenschaften der DDR, Ger. Dem. Rep.
SOURCE: Ger. (East), 8 pp.
CODEN: GEXXA8
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DD 157591	Z	19821124	DD 1977-201698	19771026 <--
PRIORITY APPLN. INFO.:			DD 1977-201698	19771026 <--

AB A low-temperature preservation method for **animal** cells, tissues, organs, and organ fragments consists of i.p. administration of a solution of Na2SeO3 to the donor **animal**, followed by freezing of the material in a cryopreservative solution containing Me2SO and then freezing in liquid N. Thus, rats were given (i.p.) 2 + 10-6 g Na2SeO3/kg body weight in a 0.9% NaCl solution on 3 successive days. The heart was removed on the 4th day, and 1-2 mm3 fragments of the atrium were prepared and frozen within 20 min at -25° in a cryoprotective solution containing Me2SO. Then the fragments were immediately frozen in liquid N and **stored** for 24 h at this temperature (-196°). After thawing the samples at 37°, the contractility of the heart fragments in response to elec. stimulation or adrenaline treatment was determined as an **index** of the survival rate of these fragments to freezing-thawing. The survival rate of fragments from **animals** treated with Na2SeO3 was 170% of that of controls which were given only 0.9% NaCl.

L15 ANSWER 43 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1978:185781 HCAPLUS
DOCUMENT NUMBER: 88:185781
TITLE: Effect of the delivery and **storage** conditions of **biological samples** on the values of blood biochemical **indexes**
AUTHOR(S): Busygin, D. V.; Pyrkov, L. M.; Stepanov, V. V.; Rybakov, V. N.
CORPORATE SOURCE: USSR
SOURCE: Novosti Meditsinskoi Tekhniki (**1976**), 3, 27-30
CODEN: NMDTAT; ISSN: 0321-2165
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB The values determined for blood **indexes** (total protein, cholesterol, bilirubin, alanine aminotransferase, and acid phosphate) were affected by the type of sample analyzed. Higher values were obtained by anal. of serum or plasma than whole blood. Temperature (4-7° or 18-22°) and **storage** time, as well as methods of transportation of specimens, had no effect. Thus, for blood anal., serum or plasma are recommended rather than whole blood.

L15 ANSWER 44 OF 44 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1957:9890 HCAPLUS

DOCUMENT NUMBER: 51:9890
ORIGINAL REFERENCE NO.: 51:2117h-i,2118a-c
TITLE: Phosphorus metabolism in yeast. III. Free nucleotides in acid extracts of phosphate-rich and phosphate-poor yeasts
AUTHOR(S): Gabriel, O.; David, I. B.; Orleanski, A.; Thill, W.; Hoffmann-Ostenhof, O.
CORPORATE SOURCE: Vienna Univ. Chem. Inst.
SOURCE: Monatshefte fuer Chemie (**1956**), 87, 515-19
CODEN: MOCMB7; ISSN: 0026-9247
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB cf. ibid. 86, 604(1955). P-rich and P-poor yeasts were produced as previously described (loc. cit.). The expts. were limited to yeasts grown under anaerobic conditions. Prepare acid-soluble P fractions from the two types of yeast, treat 20 g. of each type with liquid air, homogenize in 50 mL. of 0.6N HClO4 5 min. in a Waring Blendor, and centrifuge at 0°. Reext. the sediment with 0.2N perchloric acid. Combine the exts., neutralize with 5N KOH and **store** in the refrigerator overnight. Filter off the KClO4 supernatant in the cold and adjust to pH 8.0 with NH3. Partition the adjusted exts. chromatog. by the modified method of Cohn (C.A. 44, 5954a; Hurlbert, et al., C.A. 48, 10808d). Addnl. modifications are introduced. The extinction points of the individual fractions are at 260 and 275 mμ. Further partitioning of the fractions is done by the combined method of paper chromatog. and paper electrophoresis, described by Markham and Smith (C.A. 44, 3066i). The identified individual fractions are in every respect similar to the nucleotides in yeasts and other **biol. specimens** isolated by Schmitz (C.A. 49, 1144b) and Manson (C.A. 50, 13242b). The spectrophotometric extinction points 275 mμ/260 mμ further confirm the nucleotide nature of the fractions. By paper chromatog. and paper electrophoresis the following nucleotides are found: cytidine-5'-monophosphate, NAD, adenosine-5'-monophosphate, pyridine nucleotide, cytidine-5'-diphosphate, uridine-5'-diphosphate glycoside, guanosine-5'-diphosphate, cytidine-5'-triphosphate, adenosine-5'-triphosphate, guanosine-triphosphate, and uridine-5'-triphosphate. The quant. levels of these fractions in the two types of yeast are identical. This is further confirmed by N detns., the results of which also correspond.

```
=> d que stat l19
L1        34698 SEA FILE=HCAPLUS ABB=ON  ?BIOL?(W)(?SAMPLE? OR ?MATERIAL? OR
                ?SPECIMEN?)
L2         1118 SEA FILE=HCAPLUS ABB=ON  L1 AND (?CODE? OR ?CODING? OR
                ?LEXIC?)
L8          278 SEA FILE=HCAPLUS ABB=ON  L1 AND ?INDEX?
L9         1391 SEA FILE=HCAPLUS ABB=ON  L2 OR L8
L10          59 SEA FILE=HCAPLUS ABB=ON  L9 AND (?COORD? OR ?CONCAT? OR
                ?STOR?)
L12          44 SEA FILE=HCAPLUS ABB=ON  L10 AND (PRD<20011102 OR PD<20011102)

L13          17 SEA FILE=HCAPLUS ABB=ON  L12 AND (?VETERIN? OR ?ANIMAL?)
L15          44 SEA FILE=HCAPLUS ABB=ON  L12 OR L13
L16         101 SEA L15
L17          95 DUP REMOV L16 (6 DUPLICATES REMOVED)
L19          53 SEA L17 AND (?VETERINAR? OR ?ANIMAL?)

=> d ibib abs l19 1-53

L19  ANSWER 1 OF 53  BIOSIS  COPYRIGHT (c) 2005 The Thomson Corporation  on STN
ACCESSION NUMBER:    2001:52025  BIOSIS
DOCUMENT NUMBER:     PREV200100052025
TITLE:               Nucleotide sequences and methods for detection of Serpulina
                     hyodysenteriae.
AUTHOR(S):           Duhamel, Gerald E. [Inventor, Reprint author]; Elder,
                     Robert [Inventor]
CORPORATE SOURCE:    Lincoln, NE, USA
                     ASSIGNEE: Board of Regents University of Nebraska, Lincoln,
                     NE, USA
PATENT INFORMATION:  US 6068843 May 30, 2000
SOURCE:              Official Gazette of the United States Patent and Trademark
                     Office Patents, (May 30, 2000) Vol. 1234, No. 5.
                     e-file.
                     CODEN: OGUPE7. ISSN: 0098-1133.
DOCUMENT TYPE:       Patent
LANGUAGE:            English
ENTRY DATE:          Entered STN: 24 Jan 2001
                     Last Updated on STN: 12 Feb 2002
AB   The invention provides a method for detecting the presence of Serpulina
     hyodysenteriae in a biological sample, an
     oligonucleotide primer and an S. hyodysenteriae-specific oligonucleotide
     probe useful in that method, and an article of manufacture that contains
     the primers and/or probe.  Also provided are an about 2.3-kb DNA fragment
     derived from genomic DNA of S. hyodysenteriae and encoding for
     an about 56 kDa polypeptide, a recombinant expression vector containing
     the DNA fragment, the 56 kDa polypeptide and a monoclonal antibody
     reactive with the peptide, and a method of assaying for antibodies
     reactive with the 56 kDa peptide.

L19  ANSWER 2 OF 53  BIOSIS  COPYRIGHT (c) 2005 The Thomson Corporation  on STN
ACCESSION NUMBER:    1998:145033  BIOSIS
DOCUMENT NUMBER:     PREV199800145033
TITLE:               Clinical evaluation of medical devices: Principles and case
                     studies.
AUTHOR(S):           Witkin, Karen Becker [Editor, Reprint author]
CORPORATE SOURCE:    Weinberg Group Inc., Washington, DC, USA
SOURCE:              Witkin, K. B. [Editor]. (1998) pp. xi+271p.
                     Clinical evaluation of medical devices: Principles and case
                     studies. print.
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Publisher: Humana Press Inc., Suite 808, 999 Riverview Drive, Totowa, New Jersey 07512, USA.
ISBN: 0-89603-446-1.
DOCUMENT TYPE: Book
LANGUAGE: English
ENTRY DATE: Entered STN: 31 Mar 1998
Last Updated on STN: 31 Mar 1998

AB This book presents information regarding methods and protocols for the clinical trials of medical devices, and it presents clinical case studies for testing various surgically implanted **biological materials.** It comprises twelve individually authored chapters divided into two sections. The fundamentals of clinical study design and evaluation are addressed in the first section of the text. It compares the test methods of medical devices versus pharmaceutical evaluation using a number of clinical trials. It also presents characteristics of medical devices that impact clinical trial design. The regulatory requirements for clinical trials of medical devices and diagnostics are thoroughly examined. In part two, clinical case studies present design and research techniques including **historical** controls, device classification, preclinical device evaluation, stated hypothesis, patient selection, and sample size. Such research includes clinical studies of prosthetic heart valves, total hip arthroplasty, and injectable collagen. The design of clinical studies to evaluate effectiveness is also addressed. Incorporated into the well-referenced chapters of this text are tables, charts, graphs, photographs and other illustrations. A glossary of terms and an **index** are provided at the end of the work.

L19 ANSWER 3 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1997:365762 BIOSIS
DOCUMENT NUMBER: PREV199799657695
TITLE: Five cases of forensic short tandem repeat DNA typing.
AUTHOR(S): Schmitt, Cornelia [Reprint author]; Benecke, Mark
CORPORATE SOURCE: Inst. Forensic Med., Univ. Koeln, DNA Res. Group, Melatenguertel 60-62, 50823 Koeln, Germany
SOURCE: Electrophoresis, (**1997**) Vol. 18, No. 5, pp. 690-694.
CODEN: ELCTDN. ISSN: 0173-0835.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 25 Aug 1997
Last Updated on STN: 25 Aug 1997

AB In medicolegal samples DNA is often broken into fragments. In many cases, only the amplification of short tandem repeated DNA stretches (STRs), which are located in **noncoding** regions, allows DNA typing of such degraded materials. To demonstrate the high diversity of **biological materials** which forensic biologists have to deal with, and to outline the success rates and limits of the method, we describe five cases (minute amount of tissue on barrel, tissue in decay, tumor tissue, sperm after multiple rape, **stored** urine samples) in which forensic DNA typing was successfully performed by use of the short tandem repeats HUMDHFRP2, HUMD8S306, HUMCD4, HUMF13A1, HUMTH01, HUMVWA, and HUMFES.

L19 ANSWER 4 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1997:86623 BIOSIS
DOCUMENT NUMBER: PREV199799378336
TITLE: Examination of beards attached to the wooden stature of "Ryouchiku Okumura".
AUTHOR(S): Takayasu, Tatsunori [Reprint author]; Minamino, Tomoyoshi

[Reprint author]; Ohshima, Tohru [Reprint author]; Fujioka, Yoshinori; Terahata, Kisaku; Okumura, Tadashi
CORPORATE SOURCE: Dep. Legal Med., Kanazawa Univ., Fac. Med., Kanazawa, Japan
SOURCE: Research and Practice in Forensic Medicine, (**1996**) Vol. 39, No. 0, pp. 55-59.
ISSN: 0289-0755.
DOCUMENT TYPE: Article
LANGUAGE: Japanese
ENTRY DATE: Entered STN: 26 Feb 1997
Last Updated on STN: 26 Feb 1997

AB The beards attached to the wooden stature of 'Ryouchiku Okumura, 1686-1760', who was a medical doctor in Edo-period, have been considered to be his own. We examined the beards by scanning electron microscopy for morphological examination, by the absorption-elution method for ABO blood group, and by PCR method for sex determination. Morphological findings and the pulp **index** (width of the pulp/width of the body) of the beards showed that they were of truly human origin. In some parts of the black and/or brown beard, thin-layered compounds of unknown nature were attached to the cuticle of the beard. ABO blood group of these human beards was determined to be A. By PCR method of 36-cycle amplification of DNA extracted from the beards, they clearly showed the same male pattern as control male specimen. Therefore, the sex of the beards was likely male rather than female. From these results, forensic science can contribute to close examination of ancient **biological samples.**

L19 ANSWER 5 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1997:68347 BIOSIS
DOCUMENT NUMBER: PREV199799367550
TITLE: Gene amplification and proliferative kinetics in relation to prognosis of patients with gastric carcinoma.
AUTHOR(S): Amadori, Dino [Reprint author]; Maltoni, Marco; Volpi, Annalisa; Nanni, Oriana; Scarpi, Emanuela; Renault, Beatrice; Pellegata, Natalia S.; Gaudio, Michele; Mangi, Enrico; Ranzani, Guglielmina N.
CORPORATE SOURCE: Dep. Med. Oncol., Pierantoni Hosp., Via C. Forlanini n. 34, Forli 47100, Italy
SOURCE: Cancer, (**1997**) Vol. 79, No. 2, pp. 226-232.
CODEN: CANCAR. ISSN: 0008-543X.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 11 Feb 1997
Last Updated on STN: 11 Feb 1997

AB BACKGROUND. The differences in survival of gastric carcinoma patients who have identical clinical or pathologic stages prompted the authors to investigate the prognostic significance of biologic features that are known to affect the clinical aggressiveness of other tumor types. METHODS. One hundred twenty-four tumor samples from patients who had received radical or palliative surgery were analyzed for c-myc, c-K-ras, hst, and c-erb B-2 gene amplification by means of the Southern blot technique. Of these tumors, 70 were also examined for cell kinetics by means of the thymidine labeling **index** (TLI). RESULTS. The analysis of associations between gene amplification and the anatomicopathologic variables (TNM classification, site of tumor, and histology) showed that amplification represents a late event in the natural **history** of gastric carcinoma. Gene amplification showed a slight, statistically insignificant, negative impact on overall survival (OS) (P = 0.09). Amplification of c-erb B-2 correlated in a statistically significant way with reduced OS (P = 0.03). Cox multiple regression

analysis revealed that neither c-erb B-2 amplification nor TLI had prognostic significance in relation to OS. CONCLUSIONS. These data indicate that amplification of the examined did not reveal a new independent prognostic factor for patients with gastric carcinoma. However, the authors' results did show a strong correlation between gene amplification and tumor progression, which warrants further study involving larger series of patients. At the same time, the TLI results underlined the need to identify the most suitable **biologic material** for use in the estimation of proliferative **indexes** in gastric carcinoma.

L19 ANSWER 6 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1996:479684 BIOSIS
DOCUMENT NUMBER: PREV199699194940
TITLE: Formation of crossline as a fluorescent advanced glycation end product in vitro and in vivo.
AUTHOR(S): Obayashi, Hiroshi; Nakano, Koji [Reprint author]; Shigeta, Hirofumi; Yamaguchi, Makiko; Yoshimori, Kuniaki; Fukui, Michiaki; Fujii, Mitsuhiro; Kitagawa, Yoshihiro; Nakamura, Naoto; Nakamura, Ko; Nakazawa, Yoshitaka; Ienaga, Kazuharu; Ohta, Mitsuhiro; Nishimura, Masataka; Fukui, Iwao; Kondo, Motoharu
CORPORATE SOURCE: First Dep. Internal Med., Kyoto Prefectural Univ. Med., Kajii-cho, Kawaramachidouri, Hirokojiagaru, Kamigyo-ku, Kyoto 602, Japan
SOURCE: Biochemical and Biophysical Research Communications, (**1996**) Vol. 226, No. 1, pp. 37-41.
CODEN: BBRCA9. ISSN: 0006-291X.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 24 Oct 1996
Last Updated on STN: 24 Oct 1996

AB Crossline is one of the major advanced glycation end products resulting the reaction mixture of free amino group(s) such as epsilon-one in lysine with D-glucose in vitro. To study crossline formation on proteins in vitro and in vivo, polyclonal antiserum to the crossline hapten was prepared. This antiserum reacted with bovine and human serum albumin that had been modified by prolonged incubation with glucose as well as with crossline itself. Antisera did not react with unmodified serum albumin or the other Maillard-related compounds. Crossline was formed in a time-dependent manner when a mixture of six different proteins was incubated with glucose at pH 7.2 or 9.0. Crossline levels could be measured in rat lens proteins and the levels increased with age. The crossline content of lens proteins in diabetic rats was more than twofold hi-,her than that of age-matched controls. Results of this study suggest that most proteins containing advanced glycation end products have crossline-like structures. Measurement of crossline-like structures in **biological specimens** may provide an **index** of aging, and of the development of diabetic complications.

L19 ANSWER 7 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1996:364610 BIOSIS
DOCUMENT NUMBER: PREV199699086966
TITLE: Recombinant rabbit Fab with binding activity to type-1 plasminogen activator inhibitor derived from a phage-display library against human alpha-granules.
AUTHOR(S): Lang, Irene M.; Barbasi, Carlos F. Ii [Reprint author]; Schleef, Raymond R.
CORPORATE SOURCE: Dep. Mol. Biol., Scripps Res. Inst., 10666 N. Torrey Pines

Rd., La Jolla, CA 92037, USA
SOURCE: Gene (Amsterdam), (**1996**) Vol. 172, No. 2, pp. 295-298.
CODEN: GENED6. ISSN: 0378-1119.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 14 Aug 1996
Last Updated on STN: 15 Aug 1996

AB The display of panels of antibody (Ab) fragments on the surface of filamentous bacteriophage offers a way of making Ab with defined binding specificities. Because rabbit Ab are routinely utilized as immunologic probes in a variety of biological techniques, the aim of this study was to design and utilize primers for the amplification of mRNAs **encoding** rabbit kappa light and gamma heavy chains for the construction of an Ab library from this species. Using the polymerase chain reaction, a diverse Ab library with a repertoire of 2 times 10-7 clones was derived from the spleen and bone marrow of a rabbit that had been immunized with purified human platelet alpha-granules. From this library, specific clones were isolated after three rounds of affinity selection with binding activity to type-1 plasminogen activator inhibitor, a trace protein contained in platelet alpha-granules. These data indicate that recombinant phage-displayed Ab libraries obtained after immunization with complex biological antigens can be employed for the isolation of rabbit monoclonal Fab against specific antigens contained in the **biological sample.**

L19 ANSWER 8 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1996:328970 BIOSIS
DOCUMENT NUMBER: PREV199699051326
TITLE: Long-term stability of class II furcation defects treated with barrier membranes.
AUTHOR(S): Machtei, Eli E. [Reprint author]; Grossi, Sara G.; Dunford, Robert; Zambon, Joseph J.; Genco, Robert J.
CORPORATE SOURCE: State Univ. New York at Buffalo, PDRC, Dep. Oral Biol., 120 Foster Hall, 3435 Main Street, Buffalo, NY 14214-3092, USA
SOURCE: Journal of Periodontology, (**1996**) Vol. 67, No. 5, pp. 523-527.
CODEN: JOPRAJ. ISSN: 0022-3492.
DOCUMENT TYPE: Article
General Review; (Literature Review)
LANGUAGE: English
ENTRY DATE: Entered STN: 26 Jul 1996
Last Updated on STN: 27 Jul 1996

AB The present longitudinal study was designed to explore the long-term efficacy of guided tissue regeneration (GTR) in Class II furcation defects and establish the factors that might be responsible for modifying this response. Subjects with two or more mandibular molars, one of which had Class II furcation defects, received the hygienic phase of therapy followed by baseline clinical measurements and subgingival plaque sampling. GTR procedure was performed in furcation defect sites using expanded polytetrafluoroethylene (ePTFE) membranes, while the other non-furcated molars received only scaling and root planing. Twenty-eight subjects (13 females, 15 males) aged 27 to 66 were included in this longitudinal analysis. Postsurgical treatment included routine home care supplemented with daily chlorhexidine rinse and systemic tetracycline. Membranes were retrieved 4 to 6 weeks after surgery. During the first year, patients were initially seen bi-weekly and subsequently monthly for professional prophylaxis. At the end of this year, clinical measurements and samples were obtained. For the next 2 years, patients were seen

bi-annually for maintenance visits. Clinical measurements and **microbiological samples** were then repeated. Next, a tighter maintenance protocol was established and patients were seen quarterly for scaling and oral hygiene reinforcement. Final measurements and samples were taken again 1 year later (4 years postoperative). Significant probing reduction (3.00 mm) and gain in horizontal attachment (2.59 mm) were obtained 1 year postsurgery for the GTR sites. These changes were maintained over 4 years with a slight decline at the end of year 3. Changes in probing depth (PD) from year 1 to 4 served to dichotomize the sites into stable (DELTA PD ltoreq 0.9 mm), and unstable (PD increase gtoreq 1 mm). Of the 54 sites available for this analysis only 5 (9.3%) were unstable while 49 (90.7%) were stable or even further improved. Sites which exhibited minimal or no plaque (plaque **index** (PI) ltoreq 1) over the tight maintenance period had a further decrease in mean probing depth (0.43 mm) compared with a slight increase (-0.06 mm) in mean probing depth in sites with PI gtoreq 2 mm (P = 0.0235). The same phenomenon was observed for changes in relative attachment level (RAL): mean gain in RAL was 0.61 mm compared to 0.25 mm for the 2 groups, respectively (P = 0.07). Actinobacillus actinomycetemcomitans was only isolated from 2 sites at year 3, and none at year 4, compared to 21.45% of the sites at baseline. Porphyromonas gingivalis positive sites showed a continual decline over the years: 14.28% at baseline, 10.71% at year 1, and 5.1% at year 4. On the contrary, Prevotella intermedia (Pi) and Bacteroides forsythus (Bf) infected sites remained at approximately the same rate throughout the 4 years of the study (40% to 50% and 30% to 40% for Pi and Bf, respectively). Of these, Pi-infected sites exhibited less favorable clinical results compared to sites which. were not infected with this microorganism. In summary, furcation defects treated with membrane barriers can be maintained in health for at least 4 years; however, good oral hygiene and frequent recall visits as part of a complete anti-infective therapy are essential. Finally, once treated, these teeth are comparable to similar molar teeth with no previous **history** of furcation pathosis.

L19 ANSWER 9 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1996:292301 BIOSIS
DOCUMENT NUMBER: PREV199699014657
TITLE: Capillary electrophoresis and supercritical chromatography, complementary and alternative techniques for the determination of urinary metabolites of styrene.
AUTHOR(S): Simon, P [Reprint author]; Nicot, T.
CORPORATE SOURCE: Inst. Natl. de Recherche et de Securite, avenue de Bourgogne, 54501 Vandoeuvre, France
SOURCE: Journal of Chromatography B Biomedical Applications, (**1996**) Vol. 679, No. 1-2, pp. 103-112.
CODEN: JCBADL. ISSN: 0378-4347.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 25 Jun 1996
Last Updated on STN: 25 Jun 1996

AB Two analytical methods without an extraction step were developed using capillary electrophoresis and supercritical fluid chromatography in order to determine phenylglyoxylic (PGA) and mandelic (MA) acids in urine, with minimum treatment and manipulation of **biological samples** . The urine was diluted ten-fold in acetonitrile and directly injected into the analytical systems after centrifugation. Analysis was performed by capillary electrophoresis on alkyl bonded phase capillary columns with sodium formiate (4 cntdot 10-2 M)-isopropanol (9:1, v/v) as a buffer, and

by supercritical fluid chromatography on a Diol bonded phase silica column with ethanol-water-methanesulphonic acid (97.5:2.4:0. 1, v/v) as coeluent of CO-2. Detection of PGA and MA was performed by ultraviolet detection at 255 and 210 nm, respectively. The methods are in agreement, and are easily able to detect 5 mg/g creatinine for PGA, and 15 mg/g creatinine for MA, which are one twentieth of the lowest biological exposure **index** values.

L19 ANSWER 10 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 1996:238925 BIOSIS
DOCUMENT NUMBER: PREV199698787054
TITLE: Critically burnt patients: Haemodynamic status, oxygen transport and consumption, plasma cytokines.
AUTHOR(S): Gueugniaud, P. Y.; Vilasco, B.; Pham, E.; Hirschauer, C. [Reprint author]; Bouchard, C.; Fabreguette, A.; Bertin-Maghit, M.; Petit, P.
CORPORATE SOURCE: Lab. Biochim., Hop. Edouard-Herriot, 5 pl. d'Arsonval, 69437 Lyon Cedex 03, France
SOURCE: Annales Francaises d'Anesthesie et de Reanimation, (**1996**) Vol. 15, No. 1, pp. 27-35.
CODEN: AFAREO. ISSN: 0750-7658.
DOCUMENT TYPE: Article
LANGUAGE: French
ENTRY DATE: Entered STN: 28 May 1996
Last Updated on STN: 28 May 1996

AB Objective: To assess the haemodynamic and oximetric variations measured by a pulmonary artery catheter and to correlate them with the variations of the circulating cytokines during the initial intensive care phase of severely burned patients. Study design: Prospective study covering an 18-month period. Patients: Thirteen successive patients, aged over 12 years, without significant medical **history**, with a thermal burn affecting more than 50 percent of their total body surface area and admitted to our centre during the first six postburn hours. Methods: The haemodynamic and oximetric profile was investigated by inserting a blood flow-directed balloon-tipped pulmonary artery fiberoptical catheter. All patients were treated according to the protocol previously used in our centre. Blood samples were drawn on admission, every 12 hours post-injury until the 2nd day, then on the 3rd and 5th days. Cytokines were analyzed by Elisa method. Haemodynamic and oximetric measurements were achieved simultaneously with the **biological samples** during the first 5 postburn days. The analysis of variance (ANOVA) with the Duncan test was utilized for multiple comparisons between continuous variables. Results: (hivin x +- SEM): The patients were 32 +- 3 years-old and had a burn surface of 72 +- 4%. After a short hypovolemic shock period lasting a 12 hours, a hyperdynamic shock occurred which increased until the 5th day, with an increased cardiac **index** (6.9 +- 0.4 at h120 vs 2.9 +- 0.3 L cntdot min-1 cntdot m-2 at h6, P lt 0.05), increased oxygen transport and consumption (respectively 880 +- 77 at h72 vs 543 +- 58 mL cntdot min-1 at h12, P lt 0.05 and, 203 +- 15 at h72 vs 129 +- 25 mL cntdot min-1 at h6, P lt 0.05) and markedly decreased systemic vascular resistances (1,002 +- 118 at h36 vs 2,330 +- 328 dyn cntdot s cntdot cm-5 cntdot m-2 at h6, P lt 0.05). Circulating cytokines were not clearly modified except for interleukin-6 which reached early striking peaks (16,858 +- 10,330 at h24 and 15,406 +- 6,509 pg mL-1 at h36) simultaneously with the decrease in systemic vascular resistances. Conclusions: During the first post-injury week, critically burned patients develop a specific hyperdynamic circulatory status during which interleukin-6 could be a main factor decreasing systemic arterial

resistances.

L19 ANSWER 11 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1996:215013 BIOSIS
DOCUMENT NUMBER: PREV199698771142
TITLE: Measurement of urinary 8-EPI-prostaglandin F-2alpha, a novel **index** of lipid peroxidation in vivo, by immunoaffinity extraction/gas chromatography-mass spectrometry: Basal levels in smokers and nonsmokers.
AUTHOR(S): Bachi, Angela; Zuccato, Ettore; Baraldi, Monica; Fanelli, Roberto; Chiabrando, Chiara [Reprint author]
CORPORATE SOURCE: Ist. Ricerche Farmacol., 'Mario Negri', via Eritrea 62, 20157 Milano, Italy
SOURCE: Free Radical Biology and Medicine, (**1996**) Vol. 20, No. 4, pp. 619-624.
CODEN: FRBMEH. ISSN: 0891-5849.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 8 May 1996
Last Updated on STN: 8 May 1996
AB 8-Epi-prostaglandin F-2alpha (8-epi-PGF-2alpha) is an F-2-isoprostane recently identified as a marker of free radical-catalyzed lipid peroxidation in vivo and potential mediator of oxidative damage. Currently, endogenous 8-epi-PGF-2alpha is measured by gas chromatography-mass spectrometry after lengthy sample preparation. We extracted and purified 8-epi-PGF-2alpha in one step from **biological samples** on immunoaffinity columns prepared with an anti-8-epi-PGF-2alpha antiserum, raised in our laboratory. Quantitation was done by stable-isotope dilution gas chromatography/negative-ion chemical ionization mass spectrometry, with selected ion recording. Carboxylate anions of the pentafluorobenzyl ester trimethylsilyl ether derivative of 8-epi-PGF-2alpha and (2H-4)8-epi-PGF-2alpha were monitored (m/z 569 and 573). Basal urinary excretion of 8-epi-PGF-2alpha can be accurately and rapidly measured by this method. Under normal conditions rats (n = 30) excreted 2.18 +- 0.68 ng/24 h. In healthy nonsmoking young volunteers, urinary excretion of 8-epi-PGF-2alpha, measured three times on alternate days, was fairly constant (CV 210%). Nonsmokers excreted significantly less 8-epi-PGF-2alpha than age-matched smokers (8.08 +- 2.3 vs. 18.40 +- 4.77 ng/h/1.73 m-2; n = 6; p lt 0.005), as reported by others using different methods.

L19 ANSWER 12 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1995:391991 BIOSIS
DOCUMENT NUMBER: PREV199598406291
TITLE: Protection against Mycoplasma pulmonis infection by genetic vaccination.
AUTHOR(S): Lai, W. C. [Reprint author]; Bennett, M.; Johnson, S. A.; Barry, M. A.; Pakes, S. P.
CORPORATE SOURCE: Univ. Texas Southwestern Med. Cent. Dallas, Div. Comparative Med., Dep. Pathol., 5323 Harry Hines Blvd., Dallas, TX 75235, USA
SOURCE: DNA and Cell Biology, (**1995**) Vol. 14, No. 7, pp. 643-651.
CODEN: DCEBE8. ISSN: 1044-5498.
DOCUMENT TYPE: Article
LANGUAGE: English

ENTRY DATE: Entered STN: 13 Sep 1995
Last Updated on STN: 13 Sep 1995

AB The induction of an immune response against a foreign protein usually requires purification of that protein, which is injected into **animals.** The isolation of a pure protein is time consuming and costly. Recently, a technique called biolistic transformation (biological ballistic system) microparticle injection, gene gun, or particle bombardment was developed. The basic idea is that the DNA or **biological material** coated onto heavy tungsten or gold particles is shot into target cells or **animals.** We have vaccinated mice by introducing the gene (Mycoplasma pulmonis DNA or a specific fragment) **encoding** a protein recognized by a protective monoclonal antibody directly into the skin or muscle of mice by two methods: (i) using a hand-held form of the biolistic system that can propel DNA-coated gold microprojectiles (2 mu-g of DNA) directly into the skin; (ii) using a conventional intramuscular injection of the DNA (100 mu-g) into quadricep muscles of transfected mice. HeLa cells were transfected in vitro by the gene gun or by the liposomal delivery system. Indirect immunofluorescent antibody (IFA) assay of culture cells indicated that both methods could be successful. Production of antibody and cell-mediated immunity against M. pulmonis were monitored by assaying serum IFA and enzyme-linked immunosorbent assay (ELISA), and delayed type hypersensitivity. In addition, macrophage migration inhibition and lymphocyte transformation to antigen in spleen cells were also tested. Both delivery systems induced humoral and cellular immunity, and vaccinated the mice against infection. Genetic immunization by using the gene gun saves time, money, and labor; moreover, this general method is also applicable to gene therapy.

L19 ANSWER 13 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 1995:371454 BIOSIS
DOCUMENT NUMBER: PREV199598385754
TITLE: Implication of nitric oxide synthase in carcinogenesis: Analysis of the human inducible nitric oxide synthase gene.
AUTHOR(S): Esumi, Hiroyasu [Reprint author]; Ogura, Tsutomu; Kurashima, Yukiko; Adachi, Hiroko; Hokari, Atsushi; Weisz, Alessandro
CORPORATE SOURCE: Natl. Cancer Cent. Res. Inst., East, 6-5-1, Kashiwanoha, Kashiwa-shi, Chiba 277, Japan
SOURCE: Pharmacogenetics, (**1995**) Vol. 5, No. SPEC. ISSUE, pp. S166-S170.
ISSN: 0960-314X.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 30 Aug 1995
Last Updated on STN: 30 Aug 1995

AB Nitric oxide (NO) is a newly identified, multifunctional biological mediator. However, it also has deleterious effects on **biological materials.** For instance, nucleic acids, proteins, and some prosthetic groups of enzymes can be modified by NO or its reaction products with other reactive oxygen species. Endogenous nitrosamine formation through the reaction of NO or its oxidized products with amines might be involved in carcinogenesis. These deleterious effects of NO are often associated with inflammatory processes both in experimental **animals** and human. We analysed the molecular mechanism of control of expression of the inducible nitric oxide synthase (NOS) gene in mouse cells by cloning its putative promoter region. This promoter responded to various cytokines and endotoxin similarly to the endogenous NOS gene in

mouse cells. No appreciable induction of NOS was observed in human peripheral blood cells, but induction was detected in a human glioblastoma cell line A-172. Therefore, the human inducible NOS cDNA was cloned from A-172 cells and its cDNA-deduced amino acid sequence found to have about 80% similarity to those of both mouse and rat inducible NOSs. The effects of various cytokines on the induction of the gene were somewhat different from those observed in mouse cells, but the mouse promoter responded to these cytokines similarly to the endogenous NOS gene in human cells, indicating functional similarity of cis-elements of the genes **encoding** both human and mouse inducible NOS. Structural analysis of the human inducible NOS gene by Southern blot analysis revealed putative genetic restriction fragment length polymorphism in intron 5. This polymorphism could be useful for analysis and determinations of the pathophysiological significance of NOS.

L19 ANSWER 14 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 1995:258849 BIOSIS
DOCUMENT NUMBER: PREV199598273149
TITLE: Carbon disulphide: II. Investigations on the uptake of CS-2 and the excretion of its metabolite 2-thiothiazolidine-4-carboxylic acid after occupational exposure.
AUTHOR(S): Drexler, H. [Reprint author]; Goen, T.; Angerer, J.
CORPORATE SOURCE: Inst. Out-patient Clin. Occupational, Social Environ. Med., Univ. Erlangen Nuremberg, Schillerstr. 25/29, D-91054 Erlangen, Germany
SOURCE: International Archives of Occupational and Environmental Health, (**1995**) Vol. 67, No. 1, pp. 5-10.
CODEN: IAEHDW. ISSN: 0340-0131.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 13 Jun 1995
Last Updated on STN: 13 Jun 1995

AB The reported investigations on the uptake of carbon disulphide (CS-2) and the excretion of its metabolite 2-thiothiazolidine-4-carboxylic acid (TTCA) were based on results from 403 personal air samples (352 passive and 51 active samples) and 362 TTCA determinations in **biological material** measured during a field study on the adverse effects due to CS-2 exposure. The external exposure ranged from below the detection limit (0.2 ppm) to 66 ppm and the urinary TTCA excretion from below the detection limit (0.16 mg/l) to 33.4 mg/l. The excretion of TTCA in postshift urine related to creatinine and volume showed a linear correlation to the CS-2 air concentration. On the basis of these results the influence on the internal exposure of physical work load, dermal exposure and individual parameters (age, **Brocaindex**, disturbed skin barrier) was evaluated. Correlations between the TTCA values in the postshift urine and the individually measured CS-2 concentrations were carried out separately for individual departments and persons with and without indications of a disturbed skin barrier. In order to be able to judge the individual internal exposure related to external exposure, a personal quotient was formed from the TTCA level in the urine and the CS-2 air concentration measured on the same day (relative interal exposure RIE **index** = TTCA mg/g creatinine/CS-2 in ppm). On investigating interindividual differences, higher relative internal exposures were found in persons with a heavy physical work load and more intensive skin contact. It could be shown for a large group of persons exposed to CS-2 that a pathological skin condition leads to an increase in the dermal penetration rate of hazardous substances. By means of the RIE **index** it could be shown that the TTCA excretion related to the

individual external exposure increases significantly with a decreasing Broca **index**, which must be taken into consideration with greatly overweight persons and exposures in the range of the currently valid threshold limit values. The interindividual differences in internal exposure found at the same ambient air concentration emphasize the importance of biological monitoring for individual health protection and the setting of biological threshold limit values.

L19 ANSWER 15 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1995:230757 BIOSIS
DOCUMENT NUMBER: PREV199598245057
TITLE: Methods in Molecular Biology, Volume 38. Cryopreservation and freeze-drying protocols.
AUTHOR(S): Day, John G. [Editor, Reprint author]; McLellan, Mark R. [Editor]
CORPORATE SOURCE: Windermere Lab., Inst. Freshwater Ecology, Cumbria, UK
SOURCE: Day, J. G. [Editor]; McLellan, M. R. [Editor]. METH MOL BIOL, (**1995**) pp. x+254p. Methods in Molecular Biology; Cryopreservation and freeze-drying protocols. Publisher: Humana Press Inc., Suite 808, 999 Riverview Drive, Totowa, New Jersey 07512, USA. Series: Methods in Molecular Biology.
CODEN: MMBYBO. ISSN: 0097-0816. ISBN: 0-89603-296-5.
DOCUMENT TYPE: Book
(Manual)
LANGUAGE: English
ENTRY DATE: Entered STN: 9 Jun 1995
Last Updated on STN: 9 Jun 1995
AB This laboratory manual is a compilation of current methods for the **storage** of **biological material** using cryopreservation and freeze-drying. The text is thirty-eighth in a continuing series covering methods in molecular biology. The protocols have been formatted so reference to other materials is not needed. The material has been separated into twenty-three individually authored chapters. Topics covered include cryopreservation of: bacteria, yeast cultures, fungi, plant cell suspensions, human gametes, and seeds. Chapters contain an introduction, a materials and methods section, explanatory notes, and a reference list. A subject **index** is provided.

L19 ANSWER 16 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1995:220042 BIOSIS
DOCUMENT NUMBER: PREV199598234342
TITLE: The detection of opiate drugs in nontraditional specimens (Clothing): A report of ten cases.
AUTHOR(S): Tracqui, Antoine [Reprint author]; Kintz, Pascal; Ludes, Bertrand; Jamey, Carole; Mangin, Patrice
CORPORATE SOURCE: Inst. Med. Legale, Fac. Med. Strasbourg, 11 Rue Humann, F-67085 Strasbourg Cedex, France
SOURCE: Journal of Forensic Sciences, (**1995**) Vol. 40, No. 2, pp. 263-265.
CODEN: JFSCAS. ISSN: 0022-1198.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 31 May 1995
Last Updated on STN: 1 Jun 1995
AB We present a series of 10 fatalities involving opiate overdosage, in which

morphine, **codeine**, and 6-monoacetylmorphine were identified and quantified, not only in postmortem **biological samples**, but also in pieces of underwear taken from the bodies. Small tissue samples (about 1 g) were cut off from several parts of the underwear, **stored** at ambient temperature until analysis, then extracted by agitation in a mixture of chloroform/2-propanol/nheptane (60:14:26, v/v/v) and assayed using GC/MS in the single ion monitoring mode. Morphine, **codeine** and 6-monoacetylmorphine concentrations were in the range 0.02 to 9.27 mu-g/g. These results indicate that the impregnation of underwear by sweat and sebaceous secretions and/or urine provides detectable levels of the drugs excreted by these ways. Even in the absence of **biological samples**, assaying pieces of clothing may bring some evidence about the drug abuser status of their owner.

L19 ANSWER 17 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 1994:554284 BIOSIS
DOCUMENT NUMBER: PREV199598013832
TITLE: Simultaneous assay of cocaine, heroin and metabolites in hair, plasma, saliva and urine by gas chromatography-mass spectrometry.
AUTHOR(S): Wang, Wen-Ling; Darwin, William D.; Cone, Edward J. [Reprint author]
CORPORATE SOURCE: Addiction Res. Cent., Natl. Inst. Drug Abuse, P.O. Box 5180, Baltimore, MD 21224, USA
SOURCE: Journal of Chromatography B Biomedical Applications, (**1994**) Vol. 660, No. 2, pp. 279-290.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 22 Dec 1994
Last Updated on STN: 5 Jun 1995

AB As part of an ongoing research program on the development of drug detection methodology, we developed an assay for the simultaneous measurement of cocaine, heroin and metabolites in plasma, saliva, urine and hair by solid-phase extraction (SPE) and gas chromatography-mass spectrometry (GC-MS). The analytes that could be measured by this assay were the following: anhydroecgonine methyl ester; ecgonine methyl ester; ecgonine ethyl ester; cocaine; cocaethylene; benzoylecgonine; cocaethylene; norcocaethylene; benzoylnorecgonine; **codeine**; morphine; **norcodeine**; 6-acetylmorphine; normorphine; and heroin. Liquid specimens were diluted, filtered and then extracted by SPE. Additional handling steps were necessary for the analysis of hair samples. An initial wash procedure was utilized to remove surface contaminants. Washed hair samples were extracted with methanol overnight at 40 degree C. Both wash and extract fractions were collected, evaporated and purified by SPE. All extracts were evaporated, derivatized with N,O-bis(trimethylsilyl)trifluoroacetamide (BSTFA) with 1% trimethylchlorosilane (TMCS) and analyzed by GC-MS. The limit of detection (LOD) for cocaine, heroin and metabolites in **biological specimens** was approximately 1ng/ml with the exception of **norcodeine**, normorphine and benzoylnorecgonine (LOD = 5 ng / ml). The LOD for cocaine, heroin and metabolites in hair was approximately 0.1 ng/ mg of hair with the exception of **norcodeine** (LOD = 0.3 ng/mg) and normorphine and benzoylnorecgonine (LOD = 0.5 ng/mg). Coefficients of variation ranged from 3 to 26.5% in the hair assay. This assay has been successfully utilized in research on the disposition of cocaine, heroin and metabolites in hair, plasma, saliva and urine and in treatment studies.

L19 ANSWER 18 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1994:189603 BIOSIS
DOCUMENT NUMBER: PREV199497202603
TITLE: Progress in Histochemistry and Cytochemistry, Volume 27. Number 4. Methods of microwave fixation for microscopy: A review of research and clinical applications: 1970-1992.
AUTHOR(S): Login, Gary R.; Dvorak, Ann M.
CORPORATE SOURCE: Dep. Pathol., Harv. Sch. Dent. Med., Beth Israel Hosp., Boston, MA, USA
SOURCE: Login, G. R.; Dvorak, A. M. Prog. Histochem. Cytochem., (**1994**) pp. vii+127p. Progress in Histochemistry and Cytochemistry; Methods of microwave fixation for microscopy: A review of research and clinical applications: 1970-1992.
Publisher: Gustav Fischer Verlag, Villengang 2, Jena, Germany; Gustav Fischer Verlag, New York, New York, USA.
Series: Progress in Histochemistry and Cytochemistry.
CODEN: PHCCAS. ISSN: 0079-6336. ISBN: 3-437-11528-6.
DOCUMENT TYPE: Book
LANGUAGE: English
ENTRY DATE: Entered STN: 2 May 1994
Last Updated on STN: 2 May 1994
AB The application of the approporiate level of microwave energy can preserve cellular structure in even relatively large **biological samples** nearly instantaneously. This text reviews the rapidly expanding technique of microwave fixation, which generally causes far less disruption of short term cellular processes than traditional chemical and physical fixation methods, chapter topics include a **historical** review, basic methods, applications in morphologic studies (including stabilization and tandem methods), theory and observations regarding cellular mechanisms, parameters, non-uniform power distribution, and safety considerations. The text contains numerous illustrations and closes with a list of references and an **index.**

L19 ANSWER 19 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1993:192334 BIOSIS
DOCUMENT NUMBER: PREV199395102784
TITLE: ELISA detection of IL-1-beta in human sera needs independent confirmation: False positives in hospitalized patients.
AUTHOR(S): Herzyk, Danuta J.; Wewers, Mark D. [Reprint author]
CORPORATE SOURCE: N325 Means Hall, 1654 Upham Drive, Columbus, OH 43210, USA
SOURCE: American Review of Respiratory Disease, (**1993**) Vol. 147, No. 1, pp. 139-142.
CODEN: ARDSBL. ISSN: 0003-0805.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 9 Apr 1993
Last Updated on STN: 9 Apr 1993
AB The detection of cytokines in human sera has become an accepted **index** of disease activity in various diseases, including sepsis. However, little attention has been paid to the specificity of these measurements. Using a sensitive sandwich enzyme-linked immunoassay (ELISA), we studied IL-1-beta detectability in sera from 419 serum samples randomly obtained from our clinical laboratory. In initial studies, 6.7% of samples were positive (n = 24, 0.1 to 1.0 ng/ml, and n = 5, 1 to 80

ng/ml). However, attempts to further characterize positive samples revealed that over 90% were falsely positive. For example, samples fractionated on Sephadex G-75 demonstrated IL-1-beta "detectability" near the void volume, and negative samples, spiked with rIL-1-beta, eluted at approximately 17 kD. To determine if this detectability was due to heterophillike antibodies, 23 of 29 "positive" samples were retested in the presence of nonimmune mouse serum. Only 2 of 23 previously positive samples were still positive. Importantly, mouse serum had no effect upon normal human serum spiked with rIL-1-beta. Furthermore, blinded samples sent to a reference laboratory also demonstated false positive IL-1-beta detection in selected samples. Taken together, these data demonstrate that the presence of nonspecific immunoactivity in sera may confound cytokine assays of human **biologic material** and suggest that, when possible, a second means of confirming ELISA-positive samples be used.

L19 ANSWER 20 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 1992:482339 BIOSIS
DOCUMENT NUMBER: PREV199294113714; BA94:113714
TITLE: BIOLOGICAL MONITORING OF WORKERS EXPOSED TO ACETONE IN ACETATE FIBRE PLANTS.
AUTHOR(S): FUJINO A [Reprint author]; SATOH T; TAKEBAYASHI T; NAKASHIMA H; SAKURAI H; HIGASHI T; MATUMURA H; MINAGUCHI H; KAWAI T
CORPORATE SOURCE: DEP HEALTH POLICY MANAGEMENT, INST IND ECOLOGICAL SCI, UNIV OCCUPATIONAL ENVIRONMENTAL HEALTH, JAPAN, 1-1 ISEIGAOKA, KITAKYUSHU, 807 JPN
SOURCE: British Journal of Industrial Medicine, (**1992**) Vol. 49, No. 9, pp. 654-657. CODEN: BJIMAG. ISSN: 0007-1072.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 27 Oct 1992
Last Updated on STN: 13 Dec 1992

AB Concentrations of acetone in urine, alveolar air, and blood were measured by gas chromatography with flame ionisation detection for 110 subjects occupationally exposed to acetone (mean 372 ppm) in three factories. Significant relations were found between the time weighted average environmental concentration and the concentration in the **biological samples.** The strongest correlation was between the concentration of acetone in urine and the degree of exposure (r = 0.71, 95% CI 0.64-0.77). This suggests that urinary acetone concentration is the best biological **index** of occupational exposure to acetone.

L19 ANSWER 21 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 1992:167369 BIOSIS
DOCUMENT NUMBER: PREV199293089694; BA93:89694
TITLE: HOME HIGHLY OPTIMIZED MICROSCOPE ENVIRONMENT.
AUTHOR(S): BRUGAL G [Reprint author]; DYE R; KRIEF B; CHASSERY J-M; TANKE H; TUCKER J H
CORPORATE SOURCE: EQUIPE RECONNAISANCE FORMES MICROSCOPIE QUANTITATIVE, CERMO, GRENOBLE, FR
SOURCE: Cytometry, (**1992**) Vol. 13, No. 2, pp. 109-116. CODEN: CYTODQ. ISSN: 0196-4763.
DOCUMENT TYPE: Article

FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 31 Mar 1992
Last Updated on STN: 31 Mar 1992

AB The Highly Optimized Microscope Environment (HOME) is a computerized microscope designed to assist pathologists and cytotechnicians in clinical routine tasks. The prototype system consists of a IBM-PC compatible computer and a light microscope in which a built-in high-resolution computer display image is superimposed on the optical image of the specimen. Also, a manually operated **encoding** stage and objective turret **encoder** are used to provide continuous monitoring of the stage **coordinates** and microscope magnification to the computer. This allows any position on a slide to be uniquely defined and makes it possible to measure interactively lengths and areas larger than the size of the microscope field. Software, written in the C language and operating under the MS-DOS/MS-Windows environment, is controlled by means of a mouse-driven cursor moving over menu light-buttons displayed on the microscope image. The HOME microscope workstation is potentially useful in a wide range of applications such as i) tagging information on particular cells and tissue structures that can thus be accurately located and relocated, ii) performing morphometric measurement, differential counting, and stereological assessment of **biological specimens**, and iii) training and educating laboratory personnel. Finally, HOME will offer in the near future a user-friendly interface for automatic image processing of cells and tissue entities in interactively selected specimen areas.

L19 ANSWER 22 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1992:76381 BIOSIS
DOCUMENT NUMBER: PREV199293044836; BA93:44836
TITLE: HIGH-PERFORMANCE LIQUID CHROMATOGRAPHIC DETERMINATION OF MORPHINE MORPHINE-3-GLUCURONIDE MORPHINE-6-GLUCURONIDE AND **CODEINE** IN **BIOLOGICAL SAMPLES** USING MULTI-WAVELENGTH FORWARD OPTICAL DETECTION.
AUTHOR(S): CHARI G [Reprint author]; GULATI A; BHAT R; TEBBETT I R
CORPORATE SOURCE: DEP PHARMACODYNAMICS PEDIATRICS, UNIV ILLINOIS CHICAGO, 833 S WOOD ST, CHICAGO, ILL 60612, USA
SOURCE: Journal of Chromatography Biomedical Applications, (**1991**) Vol. 571, No. 1-2, pp. 263-270.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 2 Feb 1992
Last Updated on STN: 2 Feb 1992

AB An isocratic high-performance liquid chromatographic method has been developed for the determination of morphine, morphine-3-glucuronide, morphine-6-glucuronide and **codeine** in plasma, urine and cerebrospinal fluid. The use of an efficient solid-phase extraction procedure together with a forward optical scanning detector allows a detection limit of 500 pg/ml. The method was evaluated by examination of **biological samples** taken from newborn infants following the intravenous administration of morphine sulfate.

L19 ANSWER 23 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1991:328164 BIOSIS
DOCUMENT NUMBER: PREV199141024714; BR41:24714
TITLE: IDENTIFICATION OF MORPHINE AND **CODEINE** IN

BIOLOGICAL MATERIAL.
AUTHOR(S): HALUTS I S [Reprint author]; MALAMUZH L L; OTROKH A M
CORPORATE SOURCE: CHERKASSY OBL BUR FORENSIC-MED EXPERT, CHERKASSY, USSR
SOURCE: Farmatsevtychnyi Zhurnal (Kiev), (**1990**) No. 6, pp. 61-63.
CODEN: FRZKAP. ISSN: 0367-3057.
DOCUMENT TYPE: Article
FILE SEGMENT: BR
LANGUAGE: UKRAINIAN
ENTRY DATE: Entered STN: 20 Jul 1991
Last Updated on STN: 20 Jul 1991

L19 ANSWER 24 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1990:55885 BIOSIS
DOCUMENT NUMBER: PREV199089033249; BA89:33249
TITLE: SIMULTANEOUS IDENTIFICATION AND QUANTIFICATION OF SEVERAL OPIATES AND DERIVATIVES BY CAPILLARY GAS CHROMATOGRAPHY AND NITROGEN SELECTIVE DETECTION.
AUTHOR(S): KINTZ P [Reprint author]; MANGIN P; LUGNIER A A J; CHAUMONT A J
CORPORATE SOURCE: INSTITUT DE MEDECINE LEGALE, 11 RUE HUMANN, 67085 STRASBOURG CEDEX, FRANCE
SOURCE: Zeitschrift fuer Rechtsmedizin, (**1989**) Vol. 103, No. 1, pp. 57-62.
CODEN: ZRMDAN. ISSN: 0044-3433.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 11 Jan 1990
Last Updated on STN: 11 Jan 1990
AB A capillary column gas chromatographic method is described for the simultaneous determinaton of morphine, **codeine**, heroin, 3-and 6-monoacetylmorphine, nalorphine, naloxone, ethylmorphine, and naltrexone. The drugs were extracted from 2 ml plasma, urine, or other **biological samples**, including tissue under alkaline conditions in chloroform-isopropanol-n-heptane (50:17:33, v/v), with levallorphan as an internal standard. The drugs were extracted into acid and then reextracted into chloroform after the acid had been alkalinized. After derivitization iwth trifluoroacetic anhydride, an aliquot was injected into a 25m capillary column equipped with a nitrogen phosphorus detector. The lower limits of detectability, extraction recovery, and the within-run and day-to-day precision of results were determined for each drug. Our results indicate that the procedure is suitable for use in overdose screening and therapeutic drug monitoring.

L19 ANSWER 25 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1989:17986 BIOSIS
DOCUMENT NUMBER: PREV198936005663; BR36:5663
TITLE: OBSTETRICS AND GYNECOLOGY THE CLINICAL CORE.
AUTHOR(S): WYNN R M [Reprint author]
CORPORATE SOURCE: DEP OBSTETRICS AND GYNECOL, ST JOSEPH MERCY HOSP, PONTIAC, MICH, USA
SOURCE: (**1988**) pp. XI+401P. WYNN, R. M. OBSTETRICS AND GYNECOLOGY: THE CLINICAL CORE. XI+401P. LEA AND FEBIGER: PHILADELPHIA, PENNSYLVANIA, USA. ILLUS.
ISBN: 0-8121-1108-7.
DOCUMENT TYPE: Book

FILE SEGMENT: BR
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 13 Dec 1988
Last Updated on STN: 13 Dec 1988

AB This text was written as a basic reference for medical students. The fourth edition has been supplemented with new information concerning perinatal medicine, gynecological infections, control of reproduction and basic reproductive **biology material.** The author includes anatomical aspects for the novice, and then moves onto possible complications and procedures for managing diseases and other disorders encountered in obstetrics and gynecology. Various endocrinological and genetic aspects of the field are discussed. Numerous figures and diagrams are provided and an **index** concludes the text.

L19 ANSWER 26 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1988:420739 BIOSIS
DOCUMENT NUMBER: PREV198886083351; BA86:83351
TITLE: IMMUNOLOGICAL DETERMINATION OF GALACTOSYLCERAMIDE LEVEL IN BLOOD AS A SERUM **INDEX** OF ACTIVE DEMYELINATION.
AUTHOR(S): THUILLIER Y [Reprint author]; LUBETZKI C; GOUJET-ZALC C; GALLI A; LHERMITTE F; ZALC B
CORPORATE SOURCE: LAB NEUROCHIM, INSERM U 134, HOP SALPETRIERE, 47 BD L'HOP, 75651 PARIS CEDEX 13, FRANCE
SOURCE: Journal of Neurochemistry, (**1988**) Vol. 51, No. 2, pp. 380-384.
CODEN: JONRA9. ISSN: 0022-3042.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 19 Sep 1988
Last Updated on STN: 19 Sep 1988

AB An enzyme-linked immunosorbent assay (ELISA) to determine the level of galactosylceramide (GalC) in biological fluids is described. The assay uses GalC-coated plastic microtiter plates, with binding of an antibody to GalC detected by a peroxidase-labeled second antibody. The GalC level was directly estimated in the **biological samples** without prior extraction, by competition with the coated hapten. This method allows the detection of 62 pmol of GalC (1.2 nmol/ml). Results using this procedure revealed positive sera only among patients suffering a myelin-destructive process: either primary, as in multiple sclerosis, or secondary to brain damage, as during ischemic strokes.

L19 ANSWER 27 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1986:159410 BIOSIS
DOCUMENT NUMBER: PREV198681069826; BA81:69826
TITLE: SODIUM POTASSIUM ATPASE-INHIBITING AND GLUCOSE-6-PHOSPHATE DEHYDROGENASE-STIMULATING ACTIVITY OF PLASMA AND HYPOTHALAMUS OF THE OKAMOTO SPONTANEOUSLY HYPERTENSIVE RAT.
AUTHOR(S): MILLETT J A [Reprint author]; HOLLAND S M; ALAGHBAND-ZADEH J; DE WARDENER H E
CORPORATE SOURCE: RESEARCH LAB, CHARING CROSS AND WESTMINSTER MED SCH, FULHAM PALACE ROAD, LONDON W6 8RF, UK
SOURCE: Journal of Endocrinology, (**1986**) Vol. 108, No. 1, pp. 69-74.
CODEN: JOENAK. ISSN: 0022-0795.
DOCUMENT TYPE: Article
FILE SEGMENT: BA

LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 26 Apr 1986
Last Updated on STN: 26 Apr 1986

AB The plasma of normal man and the rat, and an acetone extract of hypothalamus from the rat, have an ability to inhibit Na-K-ATPase which is related directly to salt intake. The ability of the plasma to inhibit Na-K-ATPase is raised in essential hypertension. The ability of plasma and of an acetone extract of hypothalamus from six spontaneously hypertensive (SHR) rats and six normotensive control (WKY) rats to inhibit Na-K-ATPase of fresh guinea-pig kidney was studied using cytochemical bioassay techniques. With a validated assay, which measures the capacity of **biological samples** to stimulate glucose-6-phosphate dehydrogenase (G6PD) as an **index** of their capacity to inhibit Na-K-ATPase, the mean G6PD-stimulating ability of the plasma from the SHR and the WKY rat was 772.3 ± 48.1 units/ml and 12.5 ± 2.6 units/ml respectively ($P < 0.01$) and of the hypothalamic extracts it was 2.2 ± 1.7 + 108 and 4.5 ± 1.8 + 104 units/hypothalamus ($P < 0.01$). With a semi-quantitative cytochemical assay, which measures Na-K-ATPase activity directly, plasma and an acetone extract of hypothalamus from the spontaneously hypertensive rat had much greater capacities to inhibit Na-K-ATPase than plasma and extract from the WKY rat. These raised levels of Na-K-ATPase inhibitory activity in the plasma of the SHR rat are similar to the highest values found in the plasma of patients with essential hypertension. The results suggest that the substance responsible for the increased capacity of the plasma to inhibit Na-K-ATPase may originate from the hypothalamus and that it may, in part, be involved in the mechanisms which induce the rise of arterial pressure in inherited forms of hypertension.

L19 ANSWER 28 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1985:420931 BIOSIS
DOCUMENT NUMBER: PREV198580090923; BA80:90923
TITLE: SEPARATION AND CHARACTERIZATION OF LIGHT SCATTERING TRANSIENTS FROM ROD OUTER SEGMENTS OF VERTEBRATE PHOTORECEPTORS DESIGN AND PERFORMANCE OF A MULTIANGLE FLASH PHOTOLYSIS APPARATUS.
AUTHOR(S): UHL R [Reprint author]; DESEL H; WAGNER R
CORPORATE SOURCE: MAX PLANCK INST FUER BIOPHYSIKALISCHE CHEMIE, AM FASSBERG, D-3400 GOETTINGEN, FRG
SOURCE: Journal of Biochemical and Biophysical Methods, (**1985**) Vol. 11, No. 1, pp. 31-44.
CODEN: JBBMDG. ISSN: 0165-022X.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

AB A device was built for the simple computer-controlled routine determination of the angular dependence of light scattering transients obtained from **biological material.** It was called Multi Angle Flash Photolysis Apparatus (MAFPA). The MAFPA allows the simultaneous registration of rapid, light-induced light scattering transients at 8 scattering angles between 0° and 28°. In typical applications changes in scattered light intensity as small as $\Delta I/I = 4 + 10\text{-}5$ can be resolved at scattering angles < 24°, while at 28° the resolution drops to $\Delta I/I = 2 + 10\text{-}4$. The time resolution is 32 μs. The MAFPA was designed for high accuracy, ease of use and ruggedness. It is made from relatively inexpensive parts and can be copied fairly easily by a good machine/electronics shop. The design of the MAFPA and how it was used for

the characterization of 4 structurally distinct light-induced light scattering signals from photoreceptor rod outer segments [cattle] are described. These signals are known as P (or binding) signals, G- (or dissociation) signal, N (or rhodopsin) signal and as the ATP-dependent signal AL. The signals were separated by means of their different angular dependence, their different saturation behavior and nucleotide requirement. A great number of detailed studies will have to be carried out before one can fully understand the physical and biochemical origin of these signals. At this point, it can be stated that the so-called dissociation signal, showing an angular dependence indicative of a change in refractive **index** or scattering mass, is not merely an inversion of the preceding binding signal, the latter clearly reflecting a gross structural change, i.e., a shrinkage of the disks. There are conditions where P signals are observed to persist even after the completion of the subsequent dissociation signals. The 2 remaining signals N and AL show a pronounced angular dependence which is not easily interpreted. The fact that both exhibit a maximal amplitude at relatively small angles seems to indicate the participation of rather large structural domains.

L19 ANSWER 29 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER: 1985:221964 BIOSIS
DOCUMENT NUMBER: PREV198579001960; BA79:1960
TITLE: LEVELS AND DISTRIBUTION OF TOXIC AND ESSENTIAL METALS IN **BIOLOGICAL SAMPLES** COLLECTED IN OKAYAMA PREFECTURE JAPAN.
AUTHOR(S): MORITA K [Reprint author]; OGATA M
CORPORATE SOURCE: DEP PUBLIC HEALTH, OKAYAMA UNIV MED SCH
SOURCE: Okayama Igakkai Zasshi, (**1984**) Vol. 96, No. 3-4, pp. 359-376.
CODEN: OIZAAV. ISSN: 0030-1558.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: JAPANESE

AB The levels and distribution of Mn, Zn, Fe, Cu, Pb, Hg, Cd and other trace metals in 3 kinds of **biological samples** relevant to the food chain were studied. Human whole blood samples [88] were taken from 20-59 yr old normal adult subjects (57 males and 31 females) in Okayama Prefecture, and the heavy metal concentrations were measured with a flame or flameless atomic absorption spectrophotometer. The order by level of heavy metals in the whole blood was Fe, Mg, Ca, Zn, Cu, Pb, Mn and Cd. The analytical values of each metal approximated a log-normal distribution. The levels of Fe, Mg and Zn were higher in males than in females, while that of Cu was higher in females; high correlation coefficients were obtained between Pd-Cd, Pb-Cd, Cd-Mn and Cd-Fe. The levels of Fe and Zn in males had a negative correlation with their age. Ca and Mg in females had a positive correlation. The heavy metal levels in the feathers of crows were examined as a biological **index** of heavy metal contamination. The order of heavy metals in feathers was: Zn, Fe, Mn, Pb, Hg and Cd. The concentrations of Pb and Mn were from 3-10 times higher in the feathers of crows than in human hair. The concentration levels of Cd and Cu were higher in the southern part than in the northern part of Okayama Prefecture. There were significant regional differences in the levels of Pb, Cd and Cu. The order of heavy metals in oyster was Zn, Cu, Mn, As, Ni, Cd, Pb, Se and Hg. The concentration of Zn and Cu had a significant correlation with the size of the oyster. The order of biological concentration was: Zn (22.3 + 10), Se, Cu, Mn, As, Ni and Pb (7.75 + 103-0.22 + 103).

L19 ANSWER 30 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1984:235393 BIOSIS
DOCUMENT NUMBER: PREV198477068377; BA77:68377
TITLE: CLINICAL AND MICROBIOLOGICAL EFFECTS OF SUBGINGIVAL **RESTORATIONS** WITH OVERHANGING OR CLINICALLY PERFECT MARGINS.
AUTHOR(S): LANG N P [Reprint author]; KIEL R A; ANDERHALDEN K
CORPORATE SOURCE: SCH DENTAL MED, UNIV BERNE, FREIBURGSTRASSE 7, CH-3010 BERNE, SWITZERLAND
SOURCE: Journal of Clinical Periodontology, (**1983**) Vol. 10, No. 6, pp. 563-578.
CODEN: JCPEDZ. ISSN: 0303-6979.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
AB Whether placement of subgingival **restorations** with overhanging margins results in changes in the subgingival microflora was determined. Nine dental students with clean teeth and clinically healthy gingivae (gingival **index** < 0.1) gave their consent to participate in the study. MOD cast Au onlays with 1 mm proximal overhanging margins were placed in mandibular molars for 19-27 wk. They were replaced in a cross-over design by 5 similar onlays with clinically perfect margins which served as controls. Another 5 onlays were placed in reverse order in the remaining patients. Prior to and every 2-3 wk after insertion, subgingival **microbiological samples** were obtained by inserting a fine sterile paper point for 30 s into the gingival sulcus subjacent to the **restoration.** The predominant cultivable flora was determined using continuous anaerobic culturing techniques. Following the placement of **restorations** with overhanging margins, a subgingival flora was detected which closely resembled that of chronic periodontitis. Increased proportions of gram-negative anaerobic bacteria, black-pigmented Bacteroides and an increased anaerobe:facultative ratio were noted. Following the placement of the **restorations** with clinically perfect margins, a microflora characteristic for gingival health or initial gingivitis was observed. Black-pigmented Bacteroides were detected in very low proportions (1.6-3.8%). These changes in the subgingival microflora were obvious irrespective of whether the **restorations** with the overhanging margins were placed in the 1st period of the experiment or following the cross-over. Clinically, increasing gingival indices were detected at the sites where overhanging margins were placed. Bleeding on gentle probing always preceded the peak level of black-pigmented Bacteroides. Loss of attachment was not detected in any site. Changes in the subgingival microflora after the placement of **restorations** with overhanging margins document a potential mechanism for the initiation of periodontal disease associated with iatrogenic factors.

L19 ANSWER 31 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1978:195443 BIOSIS
DOCUMENT NUMBER: PREV197866007940; BA66:7940
TITLE: ON THE METHODOLOGY OF THE THYROID EPITHELIAL CELL THICKNESS DETERMINATION.
AUTHOR(S): KALISNIK M [Reprint author]; JAKOPIN P; SUSTARSIC J
CORPORATE SOURCE: HISTOL-EMBRYOL INST, MED FAC, UNIV LJUBLJANA, PO BOX 10, 61105 LJUBLJANA, YUGOSL
SOURCE: Journal of Microscopy (Oxford), (**1977**) Vol. 110,

No. 2, pp. 157-162.
CODEN: JMICAR. ISSN: 0022-2720.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
AB Average thickness of thyroid epithelial cells may be determined directly or indirectly. [Mice and rats were studied]. By direct or caliper method, this thickness is overestimated as a result of which its empirical value must be divided by a correction factor Kd. By the indirect method the thickness of the thyroid gland epithelium is calculated as the ratio of the double volume density of the epithelium to the sum of the inner and outer surface density of the epithelium; in this case the sought for thickness value is underestimated and must consequently be multiplied by a factor Ki. Both correction factors are algebraically defined. Their values are calculated and graphically represented as a function of the thyroid activation **index** (the ratio between volume density of the epithelium and the colloid) for the range 0.1-100. Validity of the theoretical interpretation of the discrepancy between values obtained for average thickness of the thyroid epithelium by the direct and corresponding values obtained by the indirect method, is empirically tested. By introduction of appropriate correction factors the difference between the results obtained by each method apparently can be reduced. These improved direct and indirect methods for determining wall thickness of a hollow sphere seem to lend themselves to being used in stereological analysis of other biological, perhaps even non-**biological materials** of similar structure.

L19 ANSWER 32 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1978:148467 BIOSIS
DOCUMENT NUMBER: PREV197865035467; BA65:35467
TITLE: SIMULTANEOUS DETERMINATION OF **CODEINE** AND MORPHINE IN **BIOLOGICAL SAMPLES** BY GAS CHROMATOGRAPHY WITH ELECTRON CAPTURE DETECTION.
AUTHOR(S): DAHLSTROM B [Reprint author]; PAALZOW L; EDLUND P O
CORPORATE SOURCE: DEP PHARMACOL, FAC PHARM, BIOMED CENT, UNIV UPPS, BOX 573, S-751 23 UPPSALA, SWED
SOURCE: Acta Pharmacologica et Toxicologica, (**1977**) Vol. 41, No. 3, pp. 273-279.
CODEN: APTOA6. ISSN: 0001-6683.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
AB A sensitive gas chromatographic method for simultaneous determination of **codeine** and morphine in plasma and brain samples is described. It involves solvent extraction of compounds from plasma, derivatization with pentafluoropropionic anhydride and subsequent separation on a 3% OV-17 column. Quantification is performed with electron capture detection. Sensitivity of the method (0.75 ng of morphine and 7.5 ng of **codeine** in a sample) makes it especially useful for pharmacokinetic investigations. It was successfully applied to determine the time course of **codeine** and its metabolite morphine after i.v. **codeine** administration to the rat.

L19 ANSWER 33 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1977:57048 BIOSIS
DOCUMENT NUMBER: PREV197713057048; BR13:57048
TITLE: ESTIMATION OF **CODEINE** IN **BIOLOGICAL**

MATERIAL.
AUTHOR(S): ZIMNUKHOV V V; KISVYANTSEVA N M; NIKITENKO V F; SHANDYBA O A
SOURCE: Sudebno-Meditsinskaya Ekspertiza, (**1976**) Vol. 19, No. 4, pp. 34-36.
CODEN: SMEZA5. ISSN: 0039-4521.
DOCUMENT TYPE: Article
FILE SEGMENT: BR
LANGUAGE: Unavailable

L19 ANSWER 34 OF 53 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1976:113016 BIOSIS
DOCUMENT NUMBER: PREV197661013016; BA61:13016
TITLE: HYDROLYSIS OF **BIOLOGICAL MATERIALS** FOR HISTAMINE DETERMINATION ON THE ISOLATED GUINEA-PIG ILEUM.
AUTHOR(S): DABROWSKI R
SOURCE: Acta Physiologica Polonica, (**1975**) Vol. 26, No. 3, pp. 317-319.
CODEN: APYPAY. ISSN: 0044-6033.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: Unavailable

L19 ANSWER 35 OF 53 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 1999254423 EMBASE
TITLE: Biochemical characterization of a lysosomal protease deficient in classical late infantile neuronal ceroid lipofuscinosis (LINCL) and development of an enzyme-based assay for diagnosis and exclusion of LINCL in human specimens and **animal** models.
AUTHOR: Sohar I.; Sleat D.E.; Jadot M.; Lobel P.
CORPORATE SOURCE: Dr. P. Lobel, Center for Advanced Biotechnol./Med., 679 Hoes Lane, Piscataway, NJ 08854-5638, United States
SOURCE: Journal of Neurochemistry, (**1999**) Vol. 73, No. 2, pp. 700-711.
Refs: 31
ISSN: 0022-3042 CODEN: JONRA
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 008 Neurology and Neurosurgery
022 Human Genetics
029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 19990805
Last Updated on STN: 19990805
AB Classical late-infantile neuronal ceroid lipofuscinosis (LINCL), a progressive and fatal neurodegenerative disease of childhood, results from mutations in a gene (CLN2) that **encodes** a protein with significant sequence similarity to prokaryotic pepstatin-insensitive acid proteases. We have developed a sensitive protease activity assay that allows biochemical characterization of the CLN2 gene product in various human **biological samples**, including solid tissues (brain and chorionic villi), blood (buffy coat leukocytes, platelets, granulocytes, and mononuclear cells), and cultured cells (lymphoblasts, fibroblasts, and amniocytes). The enzyme has a pH optimum of 3.5 and is rapidly inactivated at neutral pH. A survey of fibroblasts and

lymphoblasts demonstrated that lack of activity was associated with LINCL arising from mutations in the CLN2 gene but not other neuronal ceroid lipofuscinoses (NCLs), including the CLN6 variant LINCL, classical infantile NCL, classical juvenile NCL, and adult NCL (Kufs' disease). A study conducted using blood samples collected from classical LINCL families whose affliction was confirmed by genetic analysis indicates that the assay can distinguish homozygotes, heterozygotes, and normal controls and thus is useful for diagnosis and carrier testing. Analysis of archival specimens indicates that several specimens previously classified as LINCL have enzyme activity and thus disease is unlikely to arise from mutations in CLN2. Conversely, a specimen previously classified as juvenile NCL lacks pepinase activity and is associated with mutations in CLN2. In addition, several **animals** with NCL-like neurodegenerative symptoms [mutant strains of mice (nclf and mnd), English setter, border collie, and Tibetan terrier dogs, sheep, and cattle] were found to contain enzyme activity and are thus unlikely to represent models for classical LINCL. Subcellular fractionation experiments indicate that the CLN2 protein is located in lysosomes, which is consistent with its acidic pH optimum for activity and the presence of mannose 6-phosphate. Taken together, these findings indicate that LINCL represents a lysosomal **storage** disorder that is characterized by the absence of a specific protease activity.

L19 ANSWER 36 OF 53 JICST-EPlus COPYRIGHT 2005 JST on STN
ACCESSION NUMBER: 1020098912 JICST-EPlus
TITLE: Immunohistological Examination of Cold Ischemic Injury of The Small Intestinal Graft.
AUTHOR: YASUNAGA MASAHIRO; TABIRA YOICHI; KAWASUJI MICHIO
CORPORATE SOURCE: Kumamoto Univ.
SOURCE: Geka to Taisha, Eiyo (Japanese Journal of Surgical Metabolism and Nutrition), (2001) vol. 35, no. 6, pp. 365-372. Journal Code: Y0699A (Fig. 4, Tbl. 1, Ref. 17) ISSN: 0389-5564
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article
LANGUAGE: Japanese
STATUS: New
AB University Wisconsin (UW) solution has provided successful 24 hour- but not 48 hr- preservation of the small intestine in small intestinal transplantation. Therefore, it is hypothesized that cell or some tissue injury are under progression in the preserved period over 24 hrs. Small intestinal grafts in male Lewis rats were isolated and then were preserved in saline or UW solution for 24 hours or 48 hours. Expression of the PCNA, p27, cadherin, and occludin were examined by immunohistological method. Apoptosis was examined by TUNNEL method. Although grafts that were preserved for 24 hrs in saline showed destructive villi and separated crypt cells, UW-preserved grafts did not show these findings. And neither solution showed changes of PCNA and p27 expression or apoptotic **index**, but they showed low expressions of cadherin and occludin. Grafts preserved in both solutions for 48 hrs showed lower expressions of cadherin and occludin than those for 24 hrs. In conclusion, loss of junctional proteins such as cadherin (within the adherens junction) and occludin (within the tight junction) were associated with cold injury of the small intestinal graft. (author abst.)

L19 ANSWER 37 OF 53 JICST-EPlus COPYRIGHT 2005 JST on STN
ACCESSION NUMBER: 1010706260 JICST-EPlus
TITLE: A Simple Method for Classification of Cell Death by Use of Thin Layer Collagen Gel for the Detection of Apoptosis

and/or Necrosis after Cancer Chemotherapy.
AUTHOR: MATSUO A; WATANABE A; TAKAHASHI T; FUTAMURA M; MORI S; SUGIYAMA Y; TAKAHASHI Y; SAJI S
CORPORATE SOURCE: Gifu Univ. School Of Medicine, Gifu
SOURCE: Jpn J Cancer Res, (2001) vol. 92, no. 7, pp. 813-819. Journal Code: F0633A (Fig. 6, Tbl. 1, Ref. 27) ISSN: 0910-5050
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article
LANGUAGE: English
STATUS: New
AB To assess the efficacy of cancer chemotherapy, an important **index** is apoptosis of the target cells, which can usually be confirmed by electron microscopy (EM). We established a new experimental technique, whereby cancer cells (MKN45) were distributed in thin collagen gel as one or two cell layers, and cultured with anti-cancer drugs (5-FU and CDDP). The cells were stained with fluorescent Hoechst 33258 (Ho) and photographed, then with hematoxylin and eosin (H&E) and again photographed, and processed for EM. This approach allowed us to characterize the patterns of death of single cells in detail. There were six patterns of cell damage: two patterns of apoptosis, early peripheral condensation of chromatin and late apoptotic bodies, two patterns of necrosis, cytoplasmic swelling and washed-out images, and two further patterns, with morphological features of both apoptosis and necrosis, neither classified into necrosis nor apoptosis. The results show that cell death patterns can be mostly determined by combining observations of Ho and H&E-stained cells without the necessity for EM observation. (author abst.)

L19 ANSWER 38 OF 53 JICST-EPlus COPYRIGHT 2005 JST on STN
ACCESSION NUMBER: 990853048 JICST-EPlus
TITLE: Molecular Structural Analysis of Actomyosin to Characterize the Motor Protein System.
AUTHOR: NAKAMACHI E
YAMADA T
CORPORATE SOURCE: Osaka Inst. Technol., Osaka, Jpn
Howa Kogyo, Co., Ltd., Aichi, Jpn
SOURCE: JSME Int Journal. Ser C. Mech Systems, Mach Elem Manuf, (1999) vol. 42, no. 3, pp. 746-752. Journal Code: X0995A (Fig. 13, Ref. 12)
ISSN: 1344-7653
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article
LANGUAGE: English
STATUS: New
AB Muscle contraction results from the relative sliding motion between thick myosin and thin actin filaments. Actomyosin is a molecular machine that converts chemical energy produced by the hydrolysis of ATP into kinetic energy. The investigation of the contractile mechanism of muscles at the atomic/molecular level was motivated by the determination of the structures of actin and myosin head S1 monomers by X-ray diffraction analyses. In order to clarify microscopic kinetic function and material heterogeneity, the molecular structural analysis of actomyosin was carried out using the molecular mechanics simulation **code** "AMBER". The 3-D molecular structures of actomyosin employ three models which consist of three kinds of myosin head S1 (with ATP, with ADP, and without nucleotide) and F-actin itself to reveal the fundamental micromechanisrn of activation in the motility assay. The minimum-energy conformations of actomyosin in the three models were determined from molecular mechanics

analyses. The differences in atomic **coordinates** and potential energy distributions show the existence of local packing and microstructural heterogeneity. Then, molecular fluctuations were studied by molecular dynamics analysis. The fluctuations reveal the dynamic properties at the atomic level and the possibility of change in the mesoscale structure as well as the emergence of the sliding motion of the entire molecule. (author abst.)

L19 ANSWER 39 OF 53 JICST-EPlus COPYRIGHT 2005 JST on STN
ACCESSION NUMBER: 970189907 JICST-EPlus
TITLE: Effects of Ration Size on Biological Characteristics and Body Constituents of Young Red Dea Bream, Pagrus major.
AUTHOR: UMINO T; NAKAGAWA H
TAKABA M
CORPORATE SOURCE: Hiroshima Univ., Higashi-hiroshima, JPN
Hiroshima Prefecture Fisheries Experimental Station, Hiroshima, JPN
SOURCE: Suisan Zoshoku (Aquiculture), (1996) vol. 44, no. 4, pp. 479-485. Journal Code: Y0285A (Fig. 2, Tbl. 3, Ref. 21)
ISSN: 0371-4217
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article
LANGUAGE: English
STATUS: New
AB The effect of the ration size(6% or satiation, 3%, and 1% of body weight per day) on biological characteristics and body constituents of young red sea bream were investigated. When fish were fed at 6% BW/day for 42 days, their energy **storage** in the form of protein, lipid, and triglycerides was enriched. In contrast, when fish were reared with 3% and 1% BW/day, their energy accumulation was inhibited. In the fatty acid profile of muscle triglycerides, there was a tendency that total polyenes decreased with decreasing ration, size, while those of phospholipids were not affected by ration size. Condition factor, hepatosomatic **index** , and muscle ratio decreased with decreasing ration size. Additionally, body depth and intestinal length showed the same tendency. The result indicates that the ration size is influential factor affecting these indices of young red sea bream. (author abst.)

L19 ANSWER 40 OF 53 JICST-EPlus COPYRIGHT 2005 JST on STN
ACCESSION NUMBER: 940205318 JICST-EPlus
TITLE: Effect of Cold-CO2 Anesthesia on Postmortem Levels of ATP-Related Compounds, pH, and Glycogenin Carp Muscle.
AUTHOR: YOKOYAMA Y; KAWAI F; KANAMORI M
CORPORATE SOURCE: Interdisciplinary Research Inst., Environmental Sciences, Kyoto, JPN
SOURCE: Nippon Suisan Gakkaishi, (1993) vol. 59, no. 12, pp. 2047-2052. Journal Code: F0898A (Fig. 4, Tbl. 2, Ref. 33)
CODEN: NSUGAF; ISSN: 0021-5392
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article
LANGUAGE: English
STATUS: New
AB Postmortem changes in the levels of ATP-related compounds were investigated in the muscle of carp which were kept in a container for 10 h at 14.DEG.C. and PCO2=80 mmHg (cold-CO2 group), at 14.DEG.C. under bubbling pure O2 gas (14.DEG.C.-O2 group), or at 23.DEG.C. under bubbling pure O2 gas (23.DEG.C.-O2 group), carp which were allowed to recover from cold-CO2 anesthesia before death (CO2-recovery group), and carp netted from a rearing tank and decapitated immediately (control group). The

changes in glycogen and pH were also measured in the muscle of cold-CO2, CO2-recovery, and control groups. The initial ATP, pH, and glycogen levels were low, while the IMP level was high in the cold-CO2 group compared with that in the control group. The carp anesthetized with cold-CO2 seemed to be in a different metabolic state. The ATP degradation rate was rapid at an early stage of **storage**, while the freshness **index** (K value) was high in the cold-CO2 group during **storage** compared with those in the control group. Inthe 14.DEG.C.-O2 and 23.DEG.C.-O2 groups, the postmortem levels of ATP-related compounds showed little difference from those in the control group. In the CO2-recovery group, the postmortem levels of ATP-related compounds, pH, glycogen, and K value also showed little difference from those in the control group. The meat quality of the carp treated with cold-CO2 anesthesia was unaffected when the carp was allowed to recover from anesthesia. (author abst.)

L19 ANSWER 41 OF 53 JICST-EPlus COPYRIGHT 2005 JST on STN
ACCESSION NUMBER: 930660196 JICST-EPlus
TITLE: Some Characteristics of Runty Fish Appearing in Seed Production of Red Sea Bream.
AUTHOR: UMINO T; OTSU M; NAKAGAWA H
TAKABA M
CORPORATE SOURCE: Hiroshima Univ., Hiroshima, JPN
Hiroshima Prefecture Fisheries Experimental Station, Hiroshima, JPN
SOURCE: Nippon Suisan Gakkaishi, (1993) vol. 59, no. 6, pp. 925-928. Journal Code: F0898A (Tbl. 3, Ref. 18)
CODEN: NSUGAF; ISSN: 0021-5392
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article
LANGUAGE: English
STATUS: New
AB In order to get basic information about runty fish which eventually result in the seed production process of red sea bream, some biological and biochemical characteristics were compared with moderately-grown and precocious-grown fish of the same lot and a similar growth stage. Runty fish were characterized by a low muscle ratio and viscerosomatic **index.** Analytical results indicated that the runty fish lacked energy reserves such as protein, lipid, and triglycerides. On the other hand, the protein/DNA value and RNA/DNA ratios of runty fish also were lower, compared to the other groups. Low energy **storage** and protein synthesis of runty fish could be partly explained in terms of low food intake under the pressure of size hierarchy. (author abst.)

L19 ANSWER 42 OF 53 JICST-EPlus COPYRIGHT 2005 JST on STN
ACCESSION NUMBER: 930516854 JICST-EPlus
TITLE: Heavy Metals Accumulated in Squid Liver(2). Interrelationships among Heavy Metal Concentrations.
AUTHOR: YOSHINAGA JUN; SHIBATA YASUYUKI; MORITA MASATOSHI
CORPORATE SOURCE: Kankyoken
SOURCE: Kankyo Kagaku (Journal of Environmental Chemistry), (1993) vol. 3, no. 2, pp. 478-479. Journal Code: L1101A (Fig. 1, Tbl. 1, Ref. 2)
ISSN: 0917-2408
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Short Communication
LANGUAGE: Japanese
STATUS: New

L19 ANSWER 43 OF 53 JICST-EPlus COPYRIGHT 2005 JST on STN

ACCESSION NUMBER: 910745501 JICST-EPlus
TITLE: Acid-fast Bacilli Detected in Umbilical **Codes** and Skins of Human at Cases of Surgical Operation.
AUTHOR: MORI T
CORPORATE SOURCE: National Inst. Leprosy Research
SOURCE: Jpn J Lepr, (1990) vol. 59, no. 2, pp. 98-112. Journal Code: F0728A (Tbl. 7, Ref. 4)
ISSN: 1342-3681
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article
LANGUAGE: English
STATUS: New

AB Acid-fast bacilli were detected in 13 (27%) of 49 skin samples in surgical operation under the procedures of collection of bacilli by centrifuging the filtrate of tissue homogenate through adsorbent cotton. Ten specimens (20%) contained cultivable organisms, including M. simiae (9 specimens) and M. gordonae (one specimen). The other 3 specimens did not contain any cultivable organism, although microscopic observation revealed the presence of acid-fast bacilli. Eight (17%) of 48 raw umbilical **codes** of babies received Cesarian operation were positive for acid-fast bacilli in the smear preparation. Six (13%) were positive in cultivation and the organisms were identified as M. simiae (4 cases), M. scrofulaceum (1 case) and M. aviumcomplex (1 case). The remaining two specimens were negative in cultivable bacteria in spite of obvious presence of acid-fast bacilli. In the case of frozen umbilical **codes**, 9 specimens (16%) were positive in acid-fast bacilli only 3 cases of which were positive in cultivable organisms, including M. gordonae (2 cases) and M. scrofulaceum (one case). M. simiae was not detected in cultivation of frozen materials. The purpose of this experiment was to isolate the microscopically detectable but uncultivable acid-fast bacilli, using experimental infection system induced in nude mouse. However, two experiments separately performed failed to achieve this purpose, because of contamination of the cultivable acid-fast bacilli among mice or death of the organisms during **storage.** (author abst.)

L19 ANSWER 44 OF 53 JICST-EPlus COPYRIGHT 2005 JST on STN
ACCESSION NUMBER: 910587603 JICST-EPlus
TITLE: Histological Detection of Lipid Peroxidation Following Infusion of Tert-Butyl Hydroperoxide and ADP-Iron Complex in Perfused Rat Livers.
AUTHOR: MASUDA Y; YAMAMORI Y
CORPORATE SOURCE: Niigata Coll. Pharmacy, Niigata, JPN
SOURCE: Jpn J Pharmacol, (1991) vol. 56, no. 2, pp. 133-142. Journal Code: G0813A (Fig. 5, Ref. 27)
CODEN: JJPAAZ; ISSN: 0021-5198
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article
LANGUAGE: English
STATUS: New

AB Lipid peroxidation was assessed histologically and biochemically in hemoglobin-free perfused rat livers using two different types of stimulators. The schiff reaction of fuchsin with cellular aldehydes was used as a histological **index** for lipid peroxidation. t-Butyl hydroperoxide(BHP, 0.8mM) infusion caused a rapid and sustained release of thiobarbituric acid reactive substances(TBARS) into the effluent perfusate for up to 60min, which was accompanied by lactate dehydrogenase(LDH) leakage after 30min. The Schiff positive foci were initially restricted to periportal zones and spread with time to whole areas, accompanied by

periportal necrosis. Co-infusion of diphenyl-p-phenylenediamine suppressed the TBARS release, with negative fuchsin staining, but the LDH leakage was unaffected. Under retrograde perfusion, BHP produced pericentral staining and necrosis. With 2.5mM ADP-100MM Fe3+, little TBARS was released up to 60min, even though the hepatic TBARS levels increased considerably by this time. By 90min, marked TBARS release occurred, but LDH leakage remained low. Irrespective of the direction of perfusion, pericentral hepatocytes became Schiff positive after 30min. The fuchsin staining method may be useful for detecting peroxidized zones of the liver lobules. (author abst.)

L19 ANSWER 45 OF 53 JICST-EPlus COPYRIGHT 2005 JST on STN
ACCESSION NUMBER: 900668333 JICST-EPlus
TITLE: Feasibility of reconstructing the history of water pollution by examining a single piece of calcified tissue.
AUTHOR: FANG L-S; SHEN P; CHEN G-S
CORPORATE SOURCE: National Sun Yat-Sen Univ., Kaohsiung, TWN
SOURCE: Biol Monit Environ Pollut, (1988) pp. 221-228. Journal Code: K19900660 (Fig. 3, Ref. 14)
ISBN: 4-486-01037-X
PUB. COUNTRY: Japan
DOCUMENT TYPE: Conference; Article
LANGUAGE: English
STATUS: New

L19 ANSWER 46 OF 53 JICST-EPlus COPYRIGHT 2005 JST on STN
ACCESSION NUMBER: 890575919 JICST-EPlus
TITLE: Relation between nutritive components of short-neck clam Tapes japonica and chemical compositions in the nearby mud.
AUTHOR: SAEKI KIYOKO; KUMAGAI HIROSHI
CORPORATE SOURCE: Yamaguchi Prefect. Res. Inst. of Health
SOURCE: Yamaguchiken Eisei Kogai Kenkyu Senta Gyoseki Hokoku, (1988) no. 9, pp. 34-37. Journal Code: Y0528A (Tbl. 3, Ref. 10)
ISSN: 0915-0498
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article
LANGUAGE: Japanese
STATUS: New

L19 ANSWER 47 OF 53 JICST-EPlus COPYRIGHT 2005 JST on STN
ACCESSION NUMBER: 880508846 JICST-EPlus
TITLE: Human biological monitoring of environmental toxic substances. Biological monitoring of cumulative hazardous chemicals.
AUTHOR: HARA ICHIRO; YOSHIDA MUNEHIRO
CORPORATE SOURCE: Kansai Medical Univ.
SOURCE: Tokishikoroji Foramu (Toxicology Forum), (1988) vol. 11, no. 4, pp. 385-393. Journal Code: Y0089A (Fig. 8, Tbl. 3, Ref. 36)
ISSN: 0287-8712
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; General Review
LANGUAGE: Japanese
STATUS: New

L19 ANSWER 48 OF 53 JICST-EPlus COPYRIGHT 2005 JST on STN
ACCESSION NUMBER: 880486941 JICST-EPlus
TITLE: Reproductive cycle and food ingestion of the sea urchin,

Strongylocentrotus nudus(A. AGASSIZ), in southern Hokkaido. II. Seasonal changes of the gut content and test weight.
AUTHOR: AGATSUMA YUKIO
SUGAWARA YOSHIO
CORPORATE SOURCE: Hokkaido Hakodate Fisheries Expl. Stn.
Tohoku Univ., Faculty of Agriculture
SOURCE: Hokkaidoritsu Suisan Shikenjo Kenkyu Hokoku (Scientific Reports of Hokkaido Fisheries Experimental Station), (1988) no. 30, pp. 43-49. Journal Code: F0676A (Fig. 3, Ref. 8)
CODEN: HSSHEE; ISSN: 0914-6830
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article
LANGUAGE: Japanese
STATUS: New
AB The seasonal changes of the gut content **index**(volume of gut content*10/test diameter2/test height, cm, g wet weight) and test weight **index**(test weight*10/test diameter2/test height, cm, g wet weight) of the sea urchin, Strongylocentrotus nudus, collected at two stations of different depth(2m and 10m) in the coastal waters of Fukushima, southern Hokkaido was examined from June 1982 to November 1983. Polysaccharide in the gonad were observed histochemically by the method of Periodic Acid Schiff(PAS) reaction. The results were summarized as follows. 1. The gut content **index** reached to a maximum in April at 2-m depth and in May at 10-m depth. From July to November, the gut content **index** and gonad **index** at both stations showed reciprocal tendency. 2. The test weight **index** reached to a maximum in January at 2-m depth. At 10-m depth, it showed little change and was lower than that at 2-m depth in all seasons. 3. The PAS reaction of the gonad at recovering-mature stage was intensely positive at both stations but it was weak soon after spawning. 4. In both sexes, nutritive cells usually grew in size and **stored** nutrients for use during gametogenesis in PAS-positive, eosinophilic globules as cytoplasmic glycogen. As gametes became numerous in testes and ovaries, the globules within the cytoplasm of nutritive cells decreased in number and the PAS reaction became weak. After spawning, the nutritive cells shrank and lost their nutrient reserves.(author abst.)

L19 ANSWER 49 OF 53 JICST-EPlus COPYRIGHT 2005 JST on STN
ACCESSION NUMBER: 870355260 JICST-EPlus
TITLE: Survey of organic chemical substances contained in mussel (Mytilus edulis L.) in coastal area of Kanagawa prefecture.
AUTHOR: IIDA KATSUHIKO
CORPORATE SOURCE: Kanagawakenkogaise Shonanshisho
SOURCE: Kanagawaken Kogai Senta Kenkyu Hokoku (Bulletin of Kanagawa Prefectural Environmental Center), (1987) no. 9, pp. 46-52. Journal Code: G0448B (Fig. 2, Tbl. 5, Ref. 8)
ISSN: 0389-9365
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Commentary
LANGUAGE: Japanese
STATUS: New

L19 ANSWER 50 OF 53 CABA COPYRIGHT 2005 CABI on STN
ACCESSION NUMBER: 97:108985 CABA
DOCUMENT NUMBER: 19970201004
TITLE: The forgotten pollinators
AUTHOR: Buchmann, S. L.; Nabhan, G. P.
SOURCE: The forgotten pollinators, (**1996**) pp. xx + 292. Bd.

Publisher: Island Press. Washington
Price: $25
ISBN: 1-55963-352-2
PUB. COUNTRY: United States
DOCUMENT TYPE: Book
LANGUAGE: English
ENTRY DATE: Entered STN: 19971007
Last Updated on STN: 19971007

AB The aim of this book is to increase awareness of the pollination process and the **animals** involved - bees and other insects, hummingbirds, bats and others. The authors combine remembered experiences from around the world with discussions of ecology, botany, crop science and the effects of human society. They explain the fundamental principles of pollination ecology with the aid of various case studies, explain how these processes have been disrupted, and address the question of agriculture and landscape **restoration.** There are chapters on bees as pollinators, honey hunters and beekeepers from ancient to present times, competition between honey bees and native pollinators, and the economics of pollination. The book contains a 16-page bibliography, a 16-page glossary explaining technical terms, a subject **index** and 6 appendixes, which include a list of pollinators of major crop plants, names and addresses of conservation and research organizations, suppliers of **biological material**, and a list of pesticides. The authors stress that the conservation issues they discuss are relevant to all, not just to scientists, students and naturalists, and the book is written so that it will appeal to a wide readership.

L19 ANSWER 51 OF 53 CABA COPYRIGHT 2005 CABI on STN
ACCESSION NUMBER: 90:31114 CABA
DOCUMENT NUMBER: 19901140422
TITLE: Ecophysiology of metals in terrestrial invertebrates
AUTHOR: Hopkin, S. P.
CORPORATE SOURCE: Department of Pure and Applied Zoology, University of Reading, Reading, UK.
SOURCE: Ecophysiology of metals in terrestrial invertebrates, (**1989**) pp. xiii + 366. 60 pp. of ref.
Publisher: Elsevier Applied Science Publishers. Barking
ISBN: 1-85166-312-6
PUB. COUNTRY: United Kingdom
DOCUMENT TYPE: Book
LANGUAGE: English
ENTRY DATE: Entered STN: 19941101
Last Updated on STN: 19941101

AB In this book, the author attempts to synthesize the wealth of available information into a coherent review of the importance of metals in the ecology and physiology of terrestrial invertebrates. In terms of coverage, multicellular invertebrates which live out of water for their whole life cycle are included, as are the terrestrial stage of those with a partial aquatic life cycle; in a few cases, the aquatic larval stages of insects are referred to where this helps to interpret metal dynamics in the adults. Microorganisms are dealt with only briefly. Following an introduction, the book is arranged in the following chapters: essentiality and toxicity of metals; sources of metals in terrestrial ecosystems; analysis of metals in **biological material**; metal pollution and terrestrial ecosystems; factors controlling uptake, **storage** and excretion of metals by terrestrial invertebrates; metals in terrestrial invertebrates at the species, organism and organ

levels; invertebrates as indicators and monitors of metal pollution in terrestrial ecosystems; and metals in terrestrial invertebrates at the cellular level. Species and subject **indexes** are included, as are 2 appendixes: a molar-weight conversion table for some metals mentioned in the text, and a list of suppliers of certified biological reference materials.

L19 ANSWER 52 OF 53 CABA COPYRIGHT 2005 CABI on STN
ACCESSION NUMBER: 80:112274 CABA
DOCUMENT NUMBER: 19801955885
TITLE: Agricultural Research 1978
AUTHOR: Lowes, J. [EDITOR]
CORPORATE SOURCE: South Africa, Department of Agricultural Technical Services; Privaatsak X144, Pretoria, South Africa.
SOURCE: Landbounavorsing 1978, (**1978**) pp. 263. Publisher: Department of Agricultural Technical Services. Pretoria
PUB. COUNTRY: South Africa
DOCUMENT TYPE: Report; Company Publication
LANGUAGE: English
ENTRY DATE: Entered STN: 19941101
Last Updated on STN: 19941101

AB The experiments reported include the effectiveness of drought resistant fodder crops, irrigation requirements of prickly peats, fertilization of annual forage sorghums, groundnut response to nutrient supply, substrate effect on soil microbial activity in relation to maize root rot, fertilizing and stover incorporation for maize, bitter-pit experiments on apples, mulching and irrigation for granadillas, effect of minimum cultivation on vineyard soil, fertilizing of Eragrostis curvula on a claypan soil, botanical changes in Paspalum/clover swards due to fertilizing, veld fertilizing in Natal, reclamation of semi-arid scrub veld. Soils studies include the use of reclamation materials on alkaline soils, the sulphur content of soils, effect of molasses meal on soil properties, classification and mapping of South Africa soils, fertilizing of a major Natal soil series, quality of irrigation water, vesicular-arbuscular mycorrhizae, radiometric assay of **biological materials** and soils, effect of chemical agents on compacted salt-affected fine sandy soil, evapotranspiration and water-use studies with weighed lysimeters.<new para>ADDITIONAL ABSTRACT:<new para>This publication contains summaries of reports from the various research institutes, including reports on the following crops:<new para>ADDITIONAL ABSTRACT:<new para>This volume contains final reports on research projects conducted by the Department of Agricultural Technical Services during 1978. A subject **index** is provided for access to the report summaries. Theses completed and scientific papers published during the year are also included. Registered research projects are listed in Afrikaans, with an English **index** provided. Subjects covered are plant production of field crops (cotton, forage crops, groundnuts, lucerne, maize, and wheat), fruit (apple, citrus, granadilla, grape, strawberry, and fruit **storage**), medicinal plants, pastures (cultivated and veld), and plantation crops; **animal** production (cattle, horses, pigs, sheep, fowl, and game); botany; plant protection (diseases, insects, and weeds); and soils (characteristics, classification, fertilizers, irrigation, microbiology, radio isotopes, salinity, soil moisture, and soil surveys).

L19 ANSWER 53 OF 53 CABA COPYRIGHT 2005 CABI on STN
ACCESSION NUMBER: 80:62054 CABA
DOCUMENT NUMBER: 19790869708

TITLE:	Clinical Parasitology Parasitologia clinica
AUTHOR:	Atias, A. [EDITOR]; Neghme, A. [EDITOR]
CORPORATE SOURCE:	Fac. de Med. Occidente, Univ. de Chile, Chile.
SOURCE:	Parasitologia clinica, (**1979**) pp. xvi + 542. Publisher: Inter-Medica. Buenos Aires
PUB. COUNTRY:	Argentina
DOCUMENT TYPE:	Book
LANGUAGE:	Spanish
ENTRY DATE:	Entered STN: 19941101 Last Updated on STN: 19941101

AB This textbook has been written as an aid to the teaching of human parasitology to medical students, especially those of Latin America. It has been compiled by 18 collaborators, most from Chile.Part I (98 pp) contains an introductory chapter (by A. Neghme) followed by chapters on the parasites, including biology and classification (A. Atias), the biochemistry of parasites (M. Agosin), the host and the host-parasite relationships (A. Atias), general pathology (R. Cespedes), the principles of immunology in parasitic infections (O.O. Barriga), congenital transmission (W. Apt), parasitism in children (E. Fanta), nutrition and parasitosis (E. Fanta and A. Neghme), ecology of parasites, and epidemiology and prophylaxis (both by A. Neghme).Part II (286pp.) by many authors is devoted to a detailed description of all the commoner parasites. Each is considered systematically under the headings of biology, epidemiology, pathology, symptomatology, diagnosis, treatment and prophylaxis. The parasites are divided into intestinal ones (Amoebae, Balantidium, Giardia, Isospora; and Ascaris, Trichuris, hookworms, Strongylus and Taenia with Cysticercus, etc.) and parasites of the blood and tissues (Malaria, leishmaniae, Chagas's disease (with 2 pp. on African trypanosomes) Toxoplasma and other tissue protozoa, filariasis, trichiniasis, Larva migrans, schistosomes, Paragonimus, Fasciola, hydatids and trichomoniasis). Some of these sections are illustrated by up to date electron microscope photographs. After each parasite a short list of references is given up to 1975.Part III (66 pp.) by several authors is devoted to the clinical aspects of parasitic infection. It contains chapters on the syndromes of infection and parasitism, anaemia and parasitosis, eosinophilia and parasitosis, parasitosis of the liver, lung, heart, eyes, central nervous system, and genitourinary system.Part IV (110 pp.) by many authors deals with arthropods of medical importance and their control.Part V (24 pp.) by M. Lorca and B. **Astorga** described the diagnosis of parasites and it has sections on laboratory techniques for the examination of **biological specimens**, and on immunological methods.Part VI (10 pp.) by A. Atias and J. Sapunar gives a brief summary of the treatment of parasites including a table of the main infections and the compounds recommended for their treatment.There is a good general **index.** The print (in double columns) is easy to read, and the binding is sturdy. This will be a good textbook of human parasitology for Spanish speaking students, with special emphasis on practical medical aspects.

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=> d his ful

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L24           3 SEA ABB=ON  SNOMED
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Mary,
I could not locate any relevant use of "Snomed," per se.

Mary Jane